

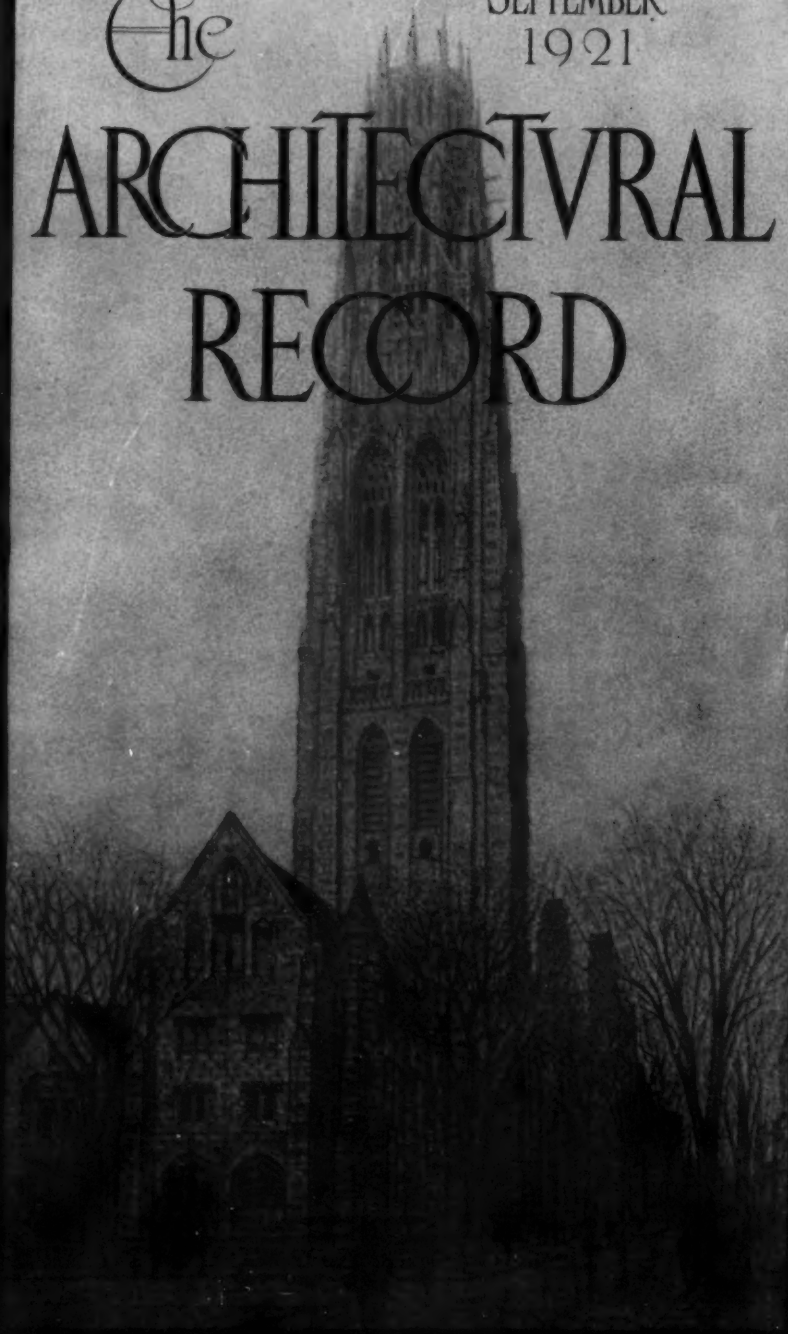
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The

# ARCHITECTURAL RECORD

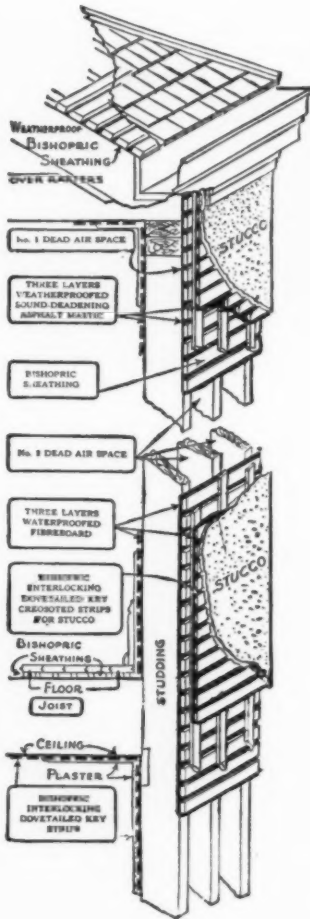


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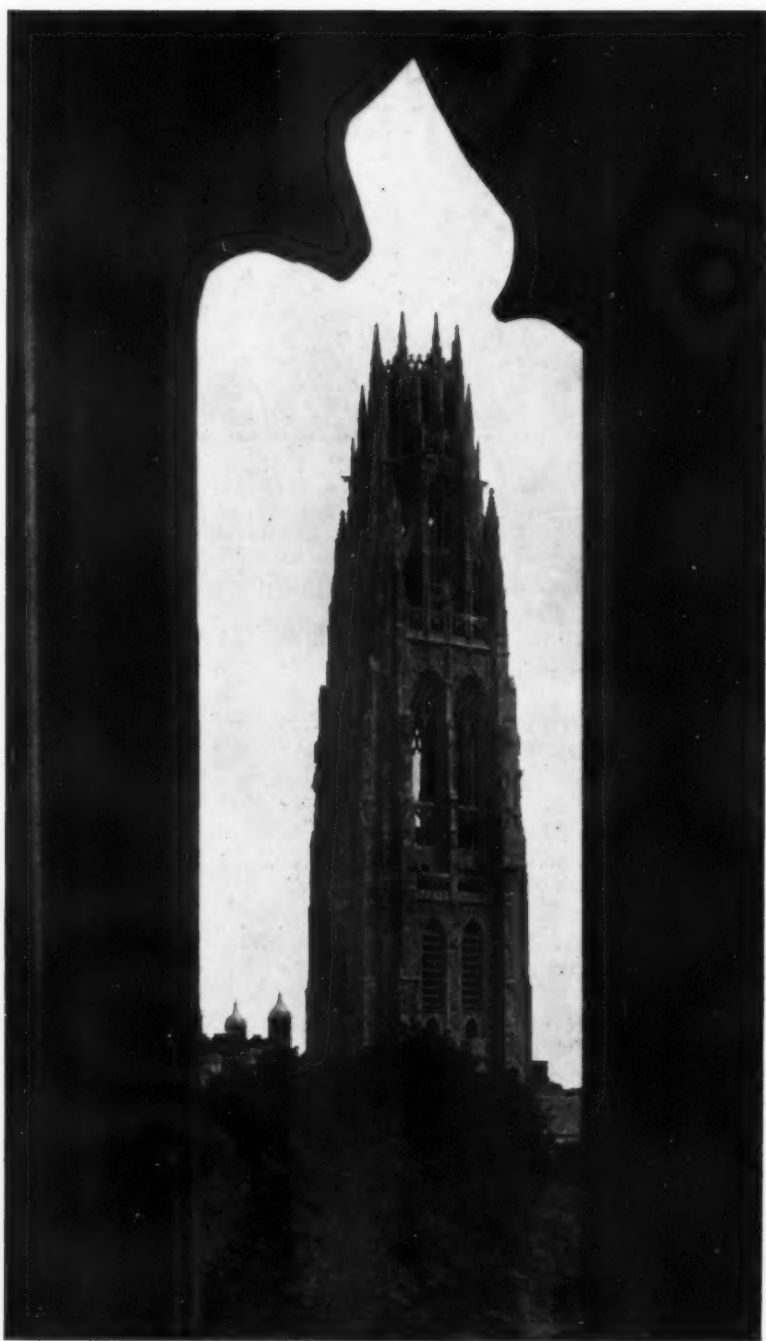
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HARKNESS TOWER—THE HARKNESS  
MEMORIAL QUADRANGLE AT YALE.  
JAMES GAMBLE ROGERS, ARCHITECT.



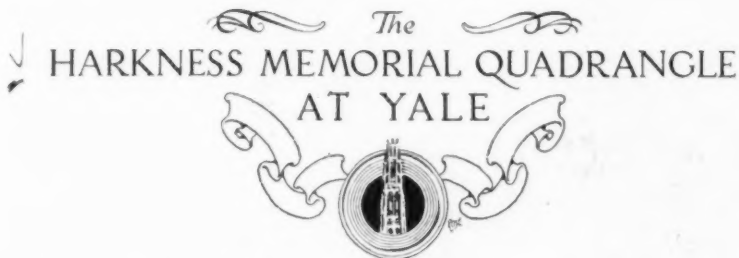
# THE ARCHITECTURAL RECORD

VOLUME L



NUMBER III

SEPTEMBER, 1921



JAMES GAMBLE ROGERS ARCHITECT

By  
*Marrion Wilcox*

YALE, mindful of the nobler traditions, has expressed them in these great stone buildings. Even our devotion to Light and Truth (the *Lux et Veritas* inscribed over the main gateway) is quickened. For, as one truth ever shows the way, as though with a light, to another truth, so especially may architectural truths—such inspiring manifestations of art as these—light the path to truth in other sciences beside that of the new aesthetics, to truth in many branches of human knowledge.

This applies to the Quadrangle as a whole. To the Harkness Tower it ap-

plies with particular force and in a special manner.

The Harkness Tower recalls certain towers in England and on the European continent. But it and they recall vividly the Hellenistic towering lighthouse, the Pharos, which was built about 280 B. C. at Alexandria. Light is a strikingly appropriate word. And further, although the word light is used figuratively in this explicit linking of the college motto and the significance of the Harkness Tower, I should fancy that, in connection with the tower, it may become possible for us to think of the word as meaning some-

thing more definite than just a source of mental or spiritual illumination. If I hear at some future time that it has been decided to illuminate at night the upper part of the principal tower—above the chime of bells—I shall not be surprised.

Meanwhile, as I study it from many points of view, the Harkness Tower exemplifies this change in architectural forms: An immortal thought of Hellenistic architecture is here expressed in Gothic terms. And the Gothic genius has wrought, gradually, through the centuries, its most characteristic modifications upon the remote Alexandrian original, transforming pilasters, panelled walls and separate columns into continuous lines of growth. These Gothic vertical lines of growth and traceried Gothic windows replace also the several terraced stages that Sostratus, architect of the Pharos, designed in such diversity of plan that the uppermost stage was circular, the stage immediately below being octagonal, while the first stage above the foundation was rectangular.

But in the Harkness Tower I find unity in diversity, with the stress on unity; for separate stages are indicated only by skilful, subtle decorative modifications, until at the highest stage the rectangular form changes, with happy effect, to the polyhedral.

The impression that the vertical continuous lines of the Harkness Tower make upon the mind of the observer naturally increases the apparent height of the structure. Because they are not interrupted by prominent horizontal string-courses or cornices, imagination readily carries such lines upward, projecting them into the blue.

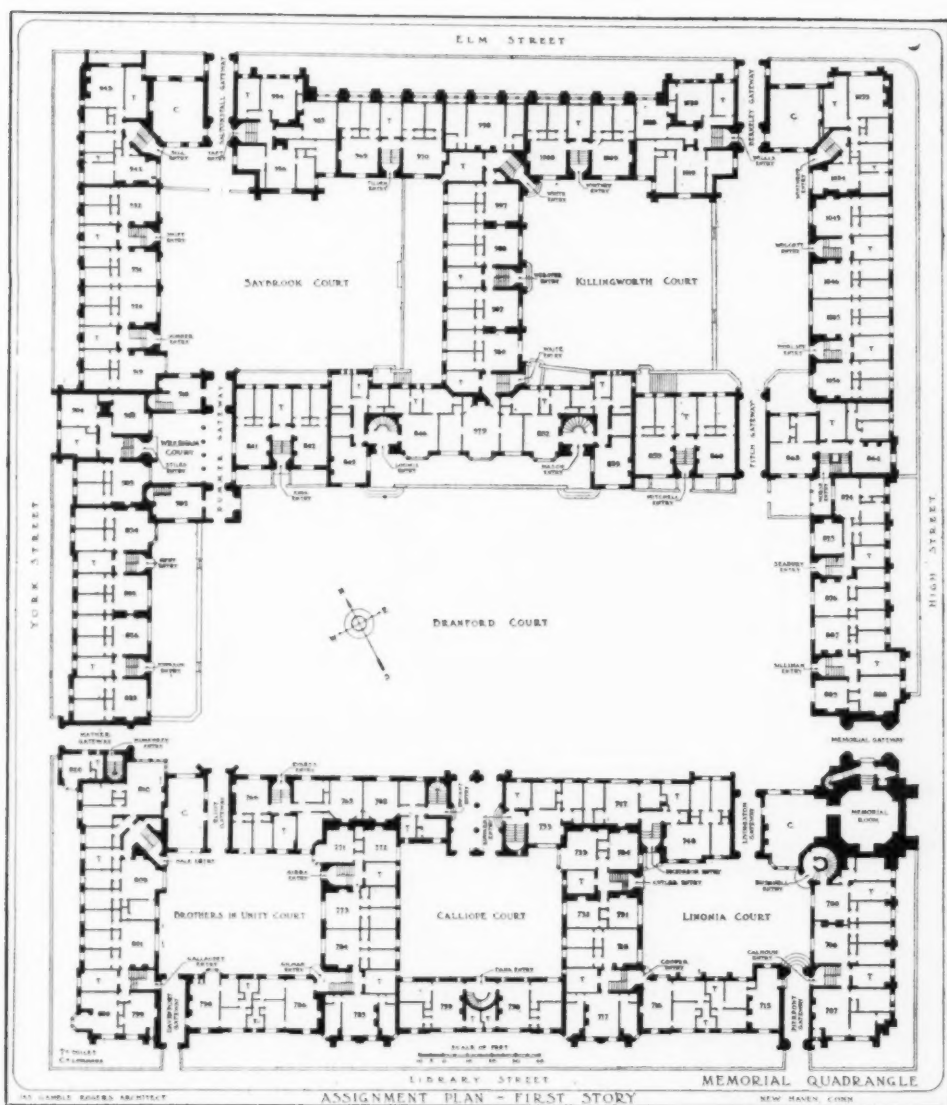
Add to this the enhancement of apparent height that is ascribable to the genuinely æsthetic use of three varieties of stone, namely, seam-face granite, that is quarried, I think, at Hingham, Massachusetts; then, as the general trimming-stone, Briar Hill sandstone from West Virginia and Ohio; with gray Indiana limestone for some of the buildings. The Harkness Tower has granite in the lower part, granite and gray stones in the middle portions, and gray stones alone at the

top. Thus the lower part is treated as the foreground, the summit as the background, of a picture; the apparent remoteness of the background from the foreground being due, in part, to the aforesaid adaptation of well-known rules of perspective in painting, *i. e.*, those relating to the gradual withdrawal of the warmer colors, stronger lines, broader masses, from the middle distance and background.

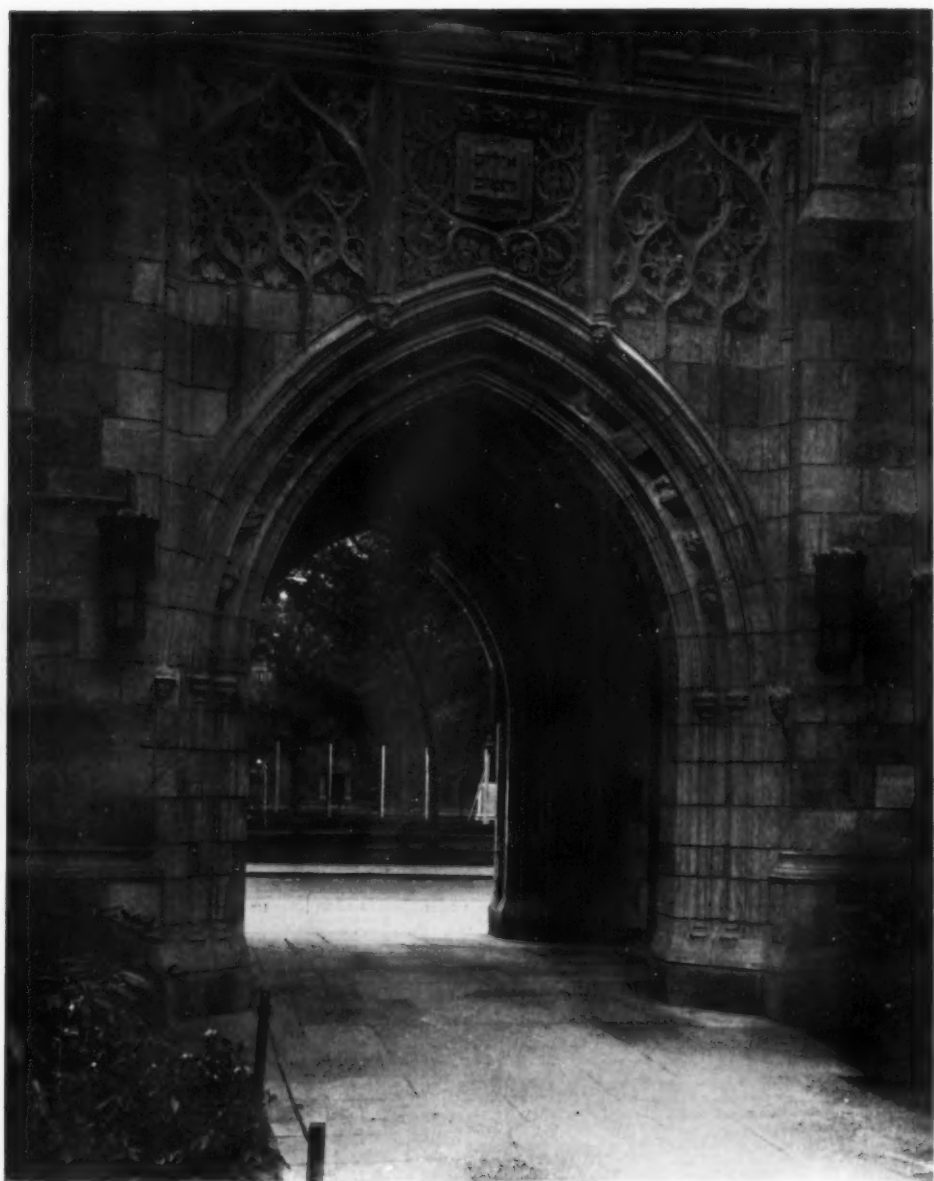
I have called the Pharos an immortal thought of Hellenistic art. Well, then, this new tower at Yale seems to me to possess the quality that visualizes art-tendencies of the past and present, and in its turn will affect those of the future.

For the first time since its actual completion, I have the pleasure of seeing it this afternoon. An imperfect impression, indeed, I received six months ago, before the scaffolding had been removed. But I saw it many years ago, when I was a boy in New Haven, and the ground on which the tower stands was part of an open lot, our playground. It was a complete structure—of its kind—then, and with its continuous, almost living lines-of-growth, was very beautiful—imperishably. It was of Yale ideals in a boy's imagination.

Now, the unity in diversity, so well achieved in the Harkness Tower, is a principle observed in this entire group of new buildings—in the Wrexham Tower and Cloister; in Branford Court, of which the north side will always be called a classic, an architectural companion of stately sixteenth-century and seventeenth-century English verse; in the smaller, charmingly homelike southern courts, "L'Allegro" courts; in the more secluded northern courts, with their higher sides, "Il Penseroso" courts; in the brilliantly successful Tourelle, that is serene on the High Street side and romantic or picturesque as a bit of Old France on the court side; in such features of the exterior as the brave tracery of a series of windows in the Elm Street façade, and that western part of the Library Street façade on which light and shadows play, or, as deep shade and high light, simply rest.



BLOCK PLAN—THE HARKNESS MEMORIAL QUADRANGLE AT YALE. JAMES GAMBLE ROGERS, ARCHITECT.



MEMORIAL GATEWAY, FROM BRANFORD COURT  
—THE HARKNESS MEMORIAL QUADRANGLE AT  
YALE. JAMES GAMBLE ROGERS, ARCHITECT.

And in this entire group of buildings one is aware of architectural work inspired by Yale's traditional loyalty, by devout patriotism. An article on Architecture in New York, written for the International Studio, has recently given my view of the accountability of architects to the people of our country. Now it is evident to me that our distinguished architect must have asked himself as his plans took shape: "Do I know, do my clients know, for whom this work will be done, really?—whose attention it will hold or invite more or less constantly? And his answer has been, I assume: This work addresses itself to all the people of our country, through those who come from every State and Territory. My public is our nation. Would it not be glorious to be able to say: I have rendered service to it!"

We shall have another age of architecture, I believe. It must be founded on such loyalty, on devout patriotism, on a worship of the ideals of home and nation. And our colleges may light the path.

I am heartily glad that the order of architecture here chosen is Gothic; that Renaissance was not chosen. For I hold that Renaissance art, in its early history disjoined from the people, has in the main lacked that spirit of life which nothing but union with the people can give. Contrast with it the Gothic, the architecture of the actual exertion of power, the order (it is called) of energy in more senses than one, witnessing "to a nation," Mr. Lethaby prompts, "in training, hunters, craftsmen, athletes," our European ancestry. I hold that the Gothic (not the English Gothic exclusively, not exclusively the soaring French Gothic, but Gothic as a whole) is the only order that can serve us fully in America. From the different periods or styles of this order it is possible to choose motives suited to any genuinely architectural work, and the art-atmosphere of every period is native air to us. Our architect has found his motives in several different periods of the Gothic. They harmonize absolutely. Again, unity in diversity.

And once again this unity in diversity,

or from diversity, should be mentioned. Here is its vital exemplification: Our architect tells me that the presentation of the theme to his clients (the nobly generous donor and her associates, I suppose) was unlike anything ever seen before. He gave them merely a general sketch-plan, showing no details; a very crude, rough model in clay that indicated the disposition and relative heights of the buildings; and a few original drawings that disclosed the spirit of the undertaking (see ARCHITECTURAL RECORD, February, 1918). Thus the clients became sharers of the æsthetic concept. He did not employ contractors, but secured the service of a builder who aided in, so to speak, avoiding diversity, and who alone had dealings with the various contractors, an arrangement making for excellence and economy in the work.

This initial spirit of shared interest, of co-operation, was carried through the whole enterprise. It extended to foremen, superintendents, sub-contractors, and workmen. Twelve laborers were Yale students. "I come from Boston," said one of the foremen, "and so I know this stone, quarried in Massachusetts and used in various buildings. But I believe the Lord had just *our* building in mind when he made this granite."

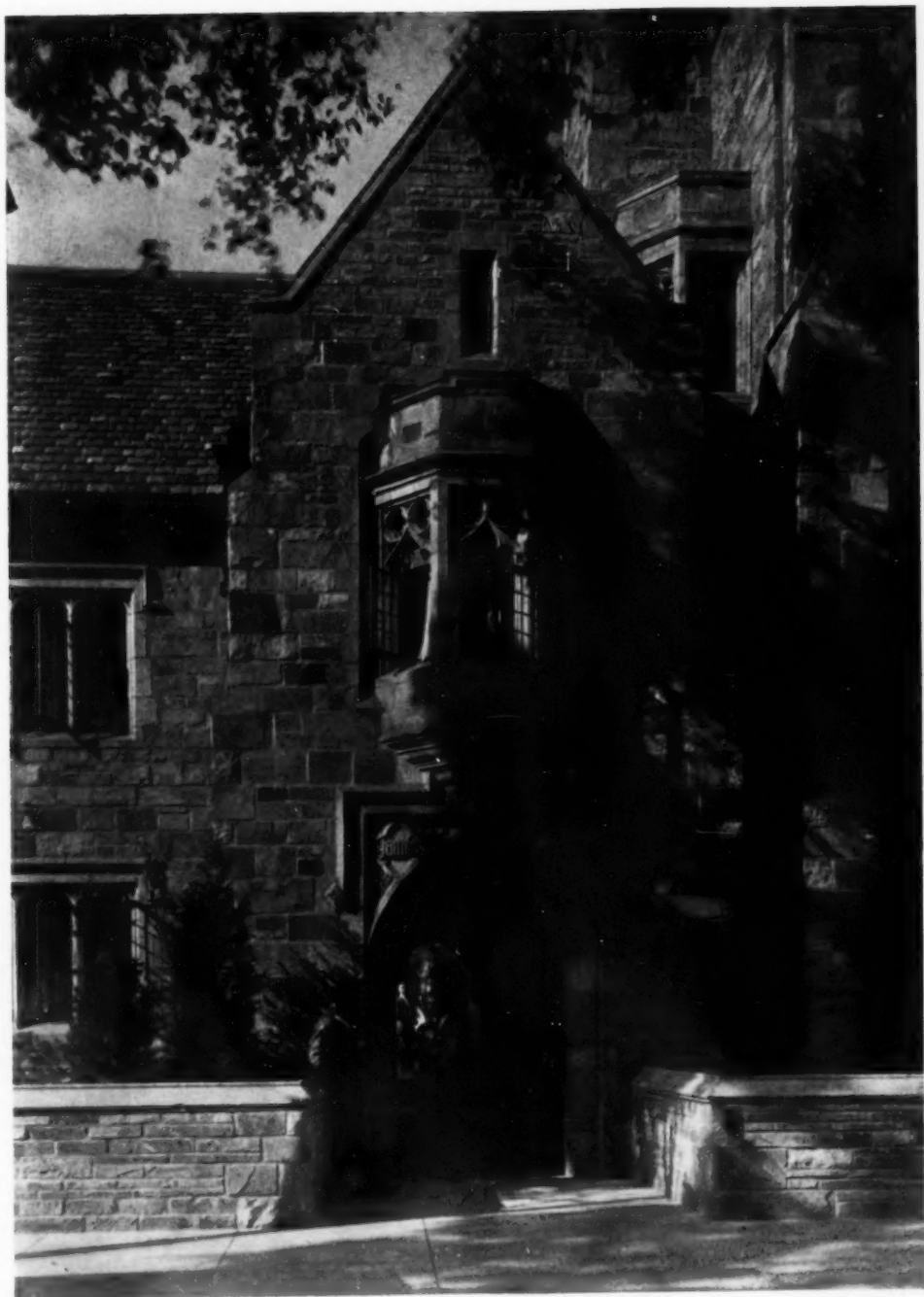
The opportunity to build so large a group, all portions of which were to be completed at one time, may be noted as an unusual circumstance. Unusual also the fact that these buildings were erected quite expeditiously during the period when building was most difficult, even in the United States.

Exceptional in a very interesting way, in a high degree, is the choice of the subject of sculpture, of ornament or decoration. History, the history of Yale or Yale's sons: this is the almost unique subject; and where any other is represented, it is such that its architectural setting merges it in the general scheme. Here, quite plainly, architecture is the father of sculpture, exercising paternal authority. Mr. Lawrie's statues, his grotesques, gargoyles, figures in the cavetto of the archway; his sculptural, epigrammatized college subjects—all true chil-

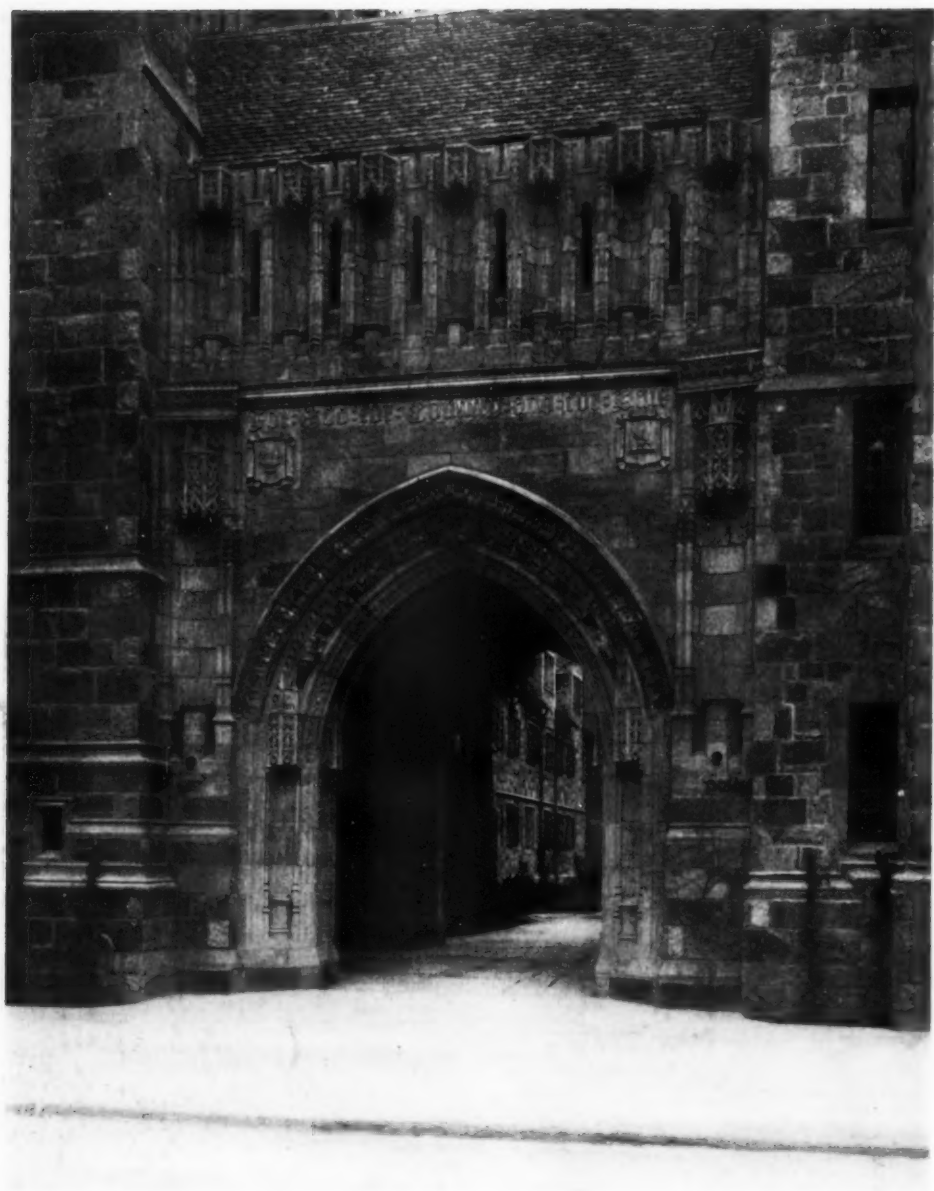




LIGHTS AND SHADOWS IN LINONIA COURT—  
THE HARKNESS MEMORIAL QUADRANGLE AT  
YALE. JAMES GAMBLE ROGERS, ARCHITECT.



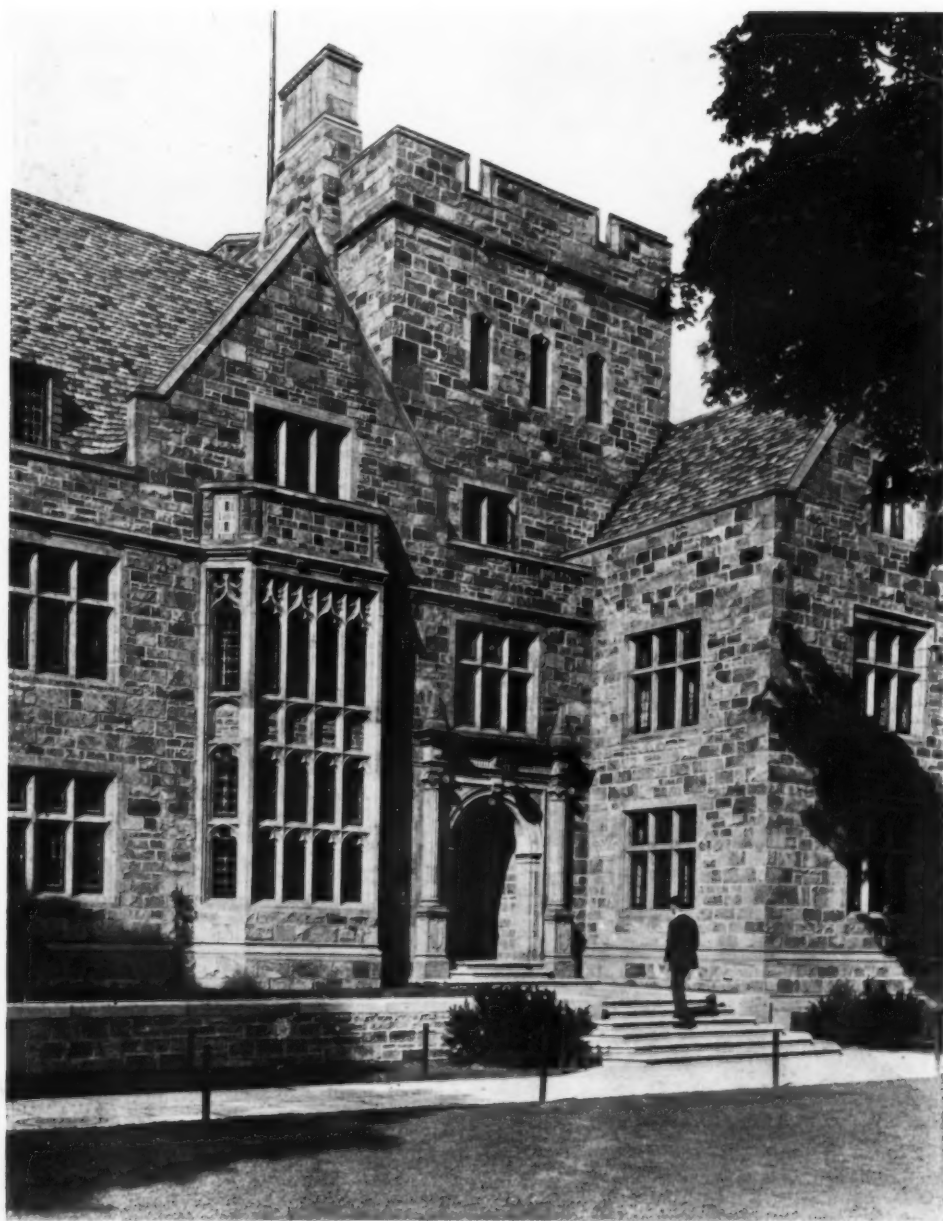
JAMES PIERPONT PASSAGE—THE HARK-  
NESS MEMORIAL QUADRANGLE AT YALE.  
JAMES GAMBLE ROGERS, ARCHITECT.



MEMORIAL GATEWAY, FROM HIGH STREET—  
THE HARKNESS MEMORIAL QUADRANGLE AT  
YALE. JAMES GAMBLE ROGERS, ARCHITECT.



THE TOURELLE, FROM BRANFORD COURT—  
THE HARKNESS MEMORIAL QUADRANGLE AT  
YALE. JAMES GAMBLE ROGERS, ARCHITECT.

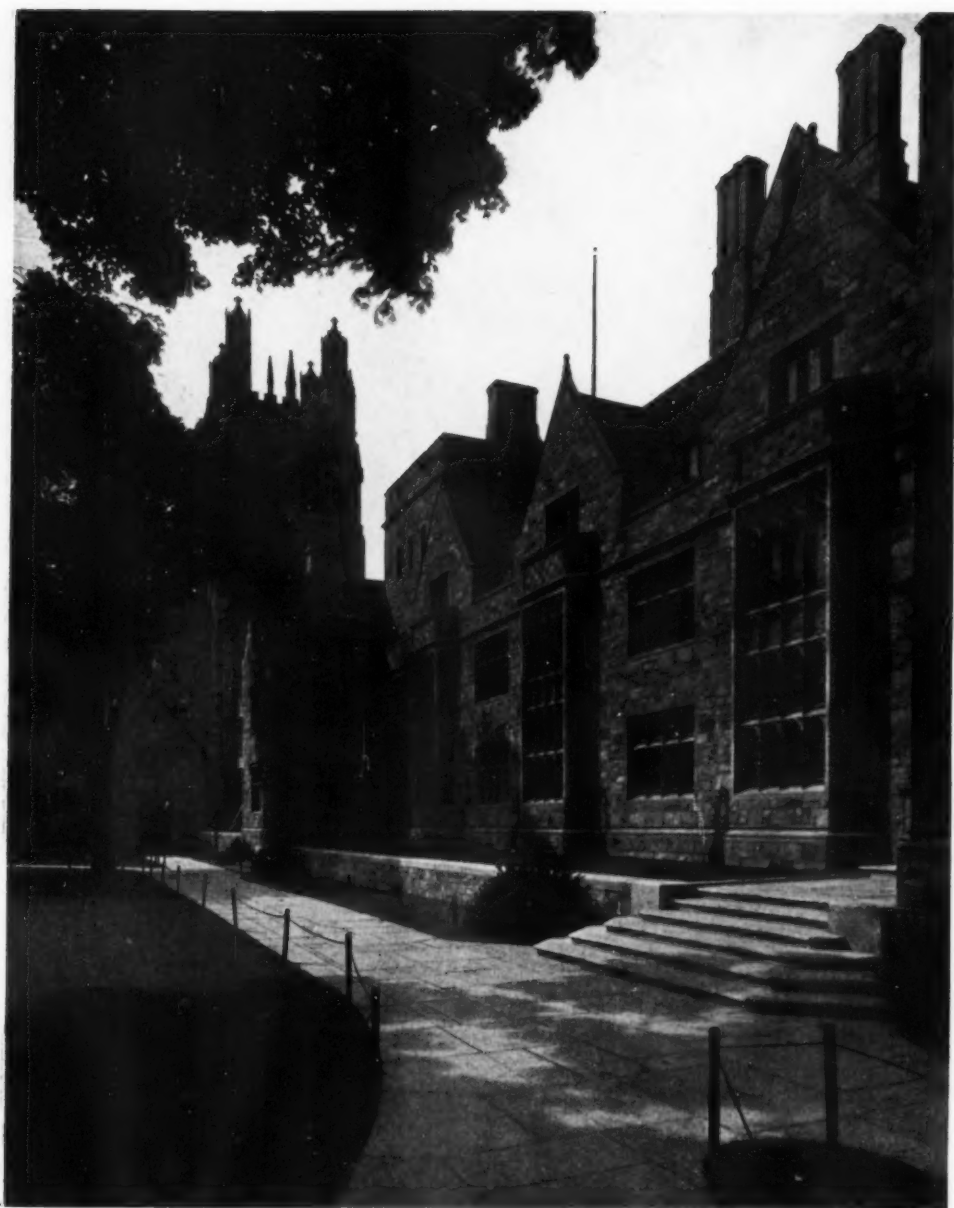


MASON ENTRY IN BRANFORD COURT—  
THE HARKNESS MEMORIAL QUADRANGLE AT  
YALE. JAMES GAMBLE ROGERS, ARCHITECT.

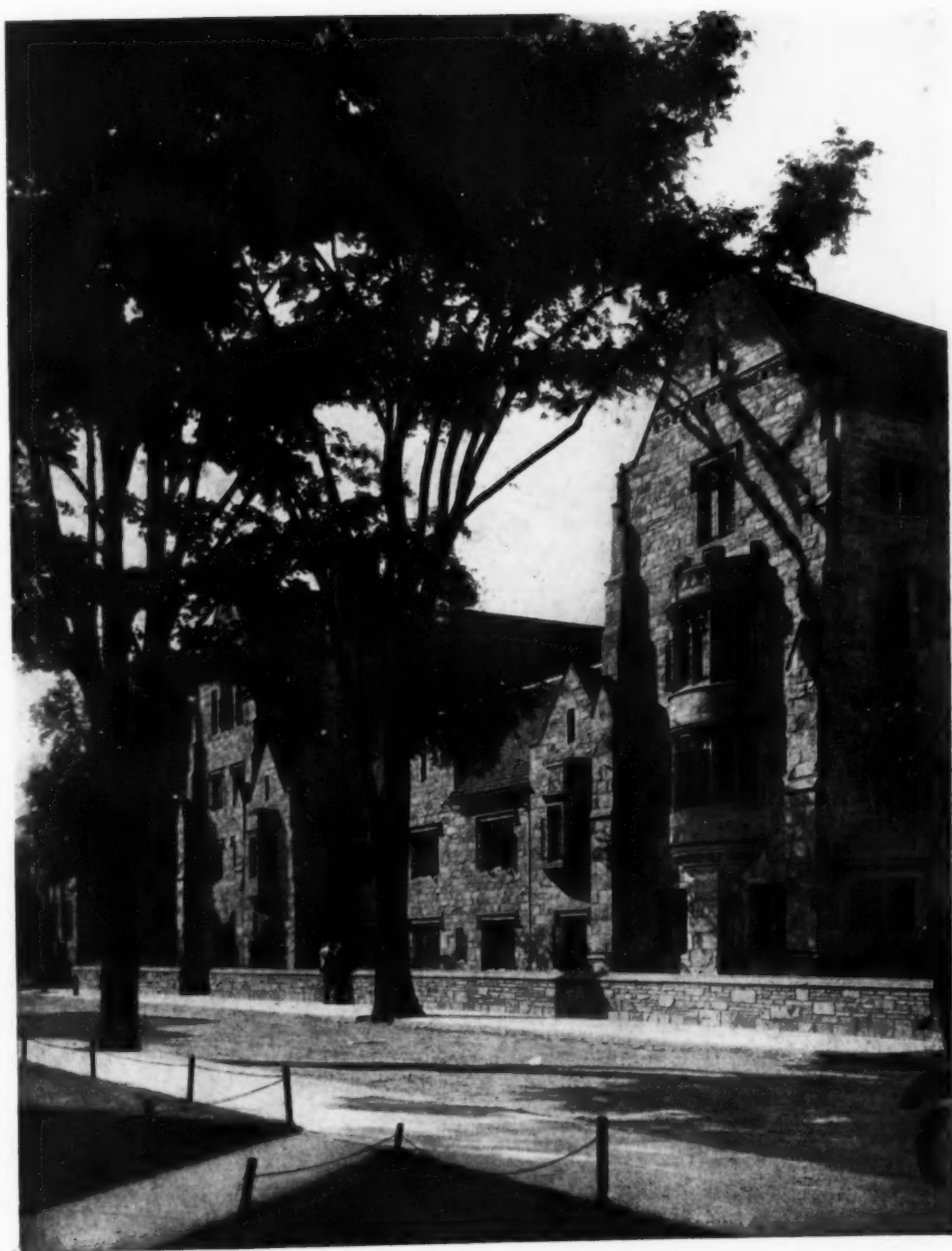




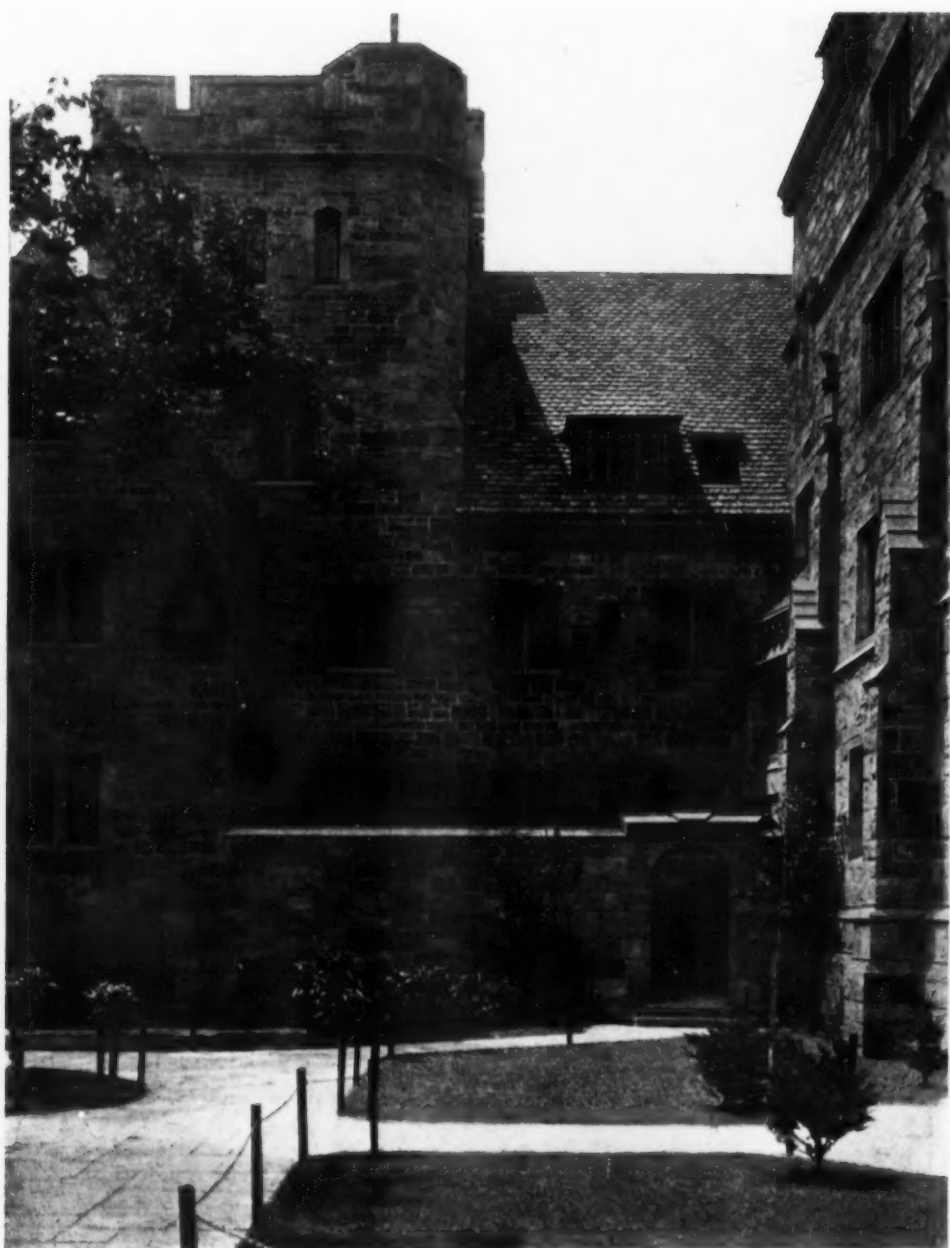
WREXHAM TOWER, FROM BRANFORD COURT—  
THE HARKNESS MEMORIAL QUADRANGLE AT  
YALE. JAMES GAMBLE ROGERS, ARCHITECT.



NORTH SIDE OF BRANFORD COURT, WITH WREXHAM TOWER  
IN BACKGROUND—THE HARKNESS MEMORIAL QUAD-  
RANGLE AT YALE. JAMES GAMBLE ROGERS, ARCHITECT.



LIBRARY STREET—THE HARKNESS  
MEMORIAL QUADRANGLE AT YALE.  
JAMES GAMBLE ROGERS, ARCHITECT.

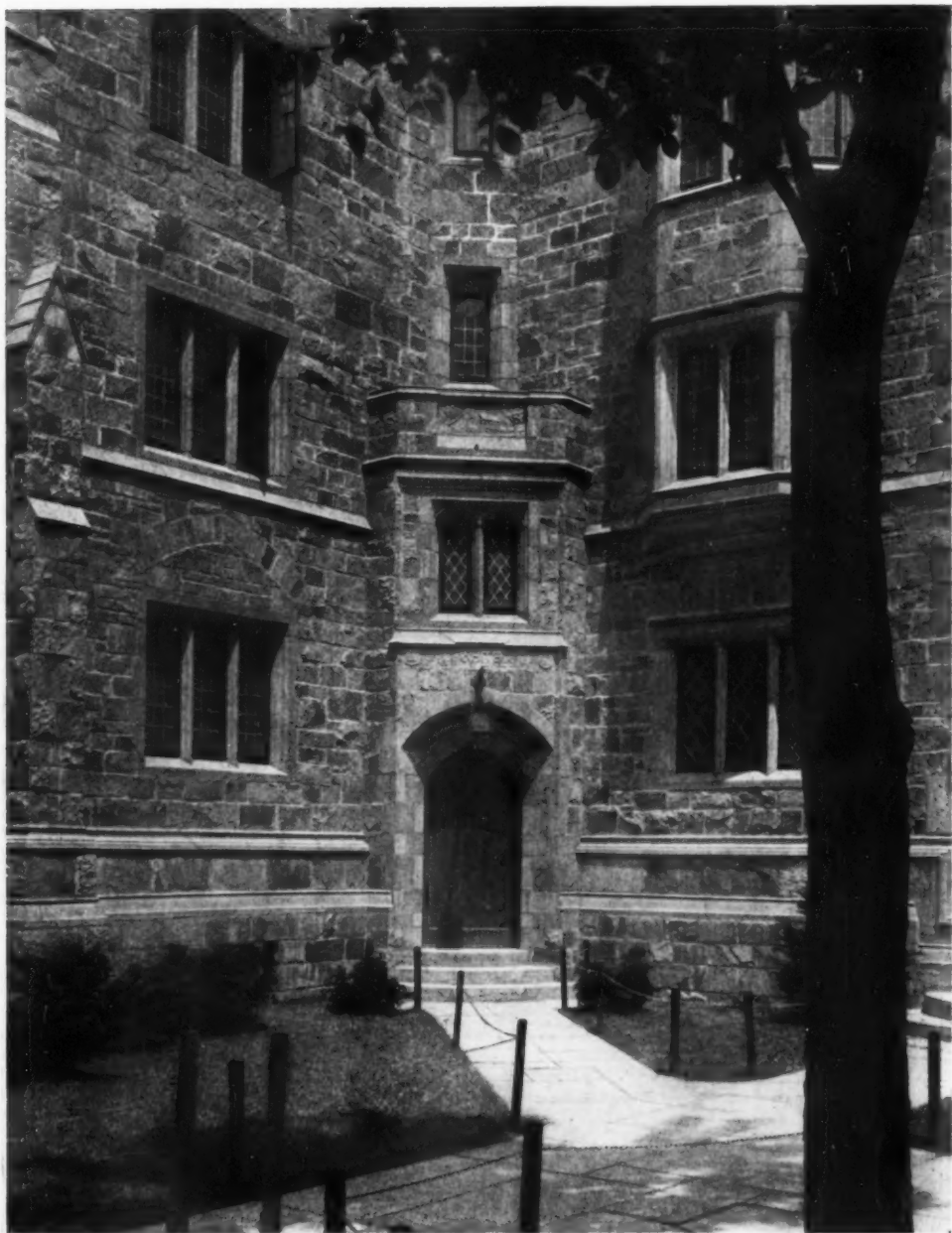


BUILDINGS ON SOUTHERN SIDE OF NORTHERN COURTS HAVE BEEN KEPT LOWER TO ADMIT SUNLIGHT—THE HARKNESS MEMORIAL QUADRANGLE AT YALE. JAMES GAMBLE ROGERS, ARCHITECT.

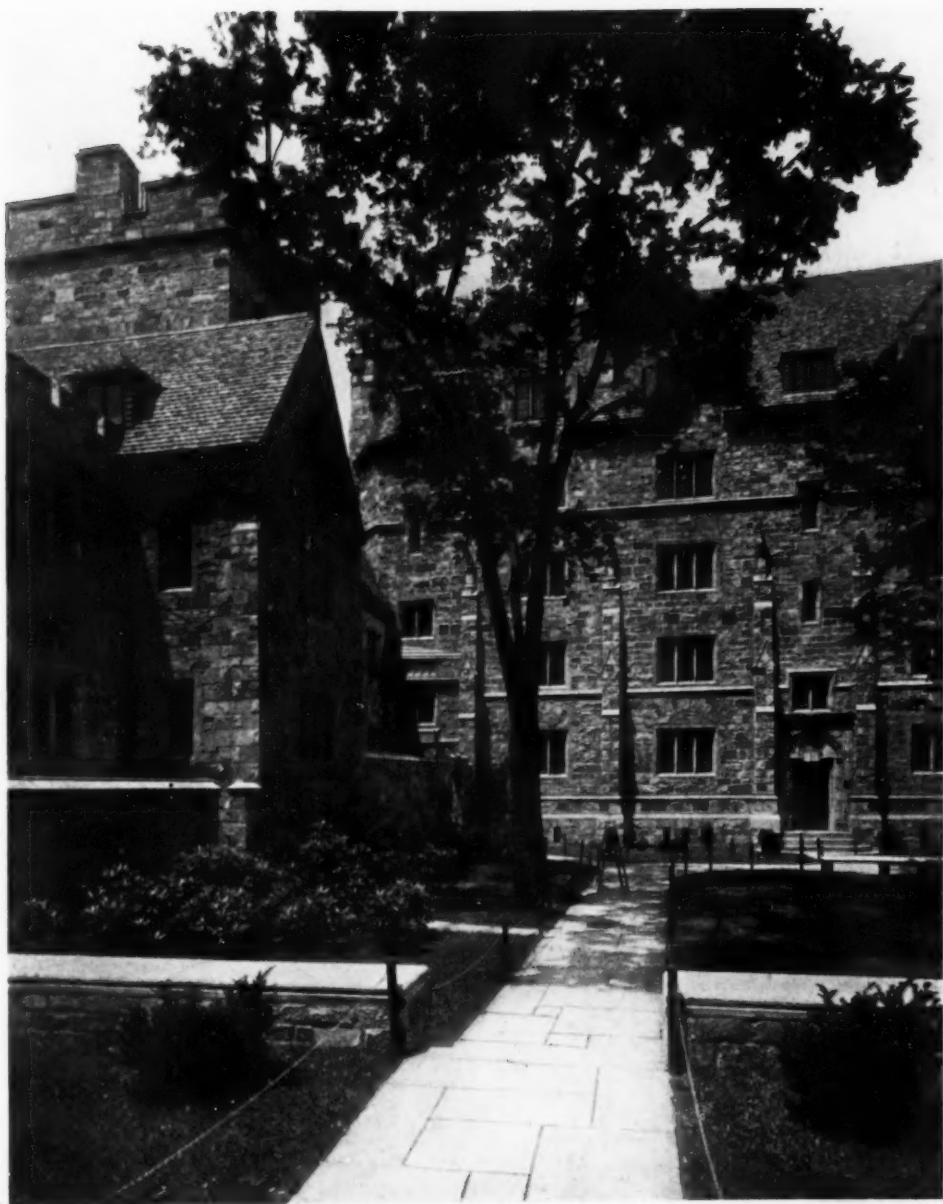


TERRACE WALL IN ONE OF THE NORTHERN COURTS—THE HARKNESS MEMORIAL QUADRANGLE AT YALE. JAMES GAMBLE ROGERS, ARCHITECT.

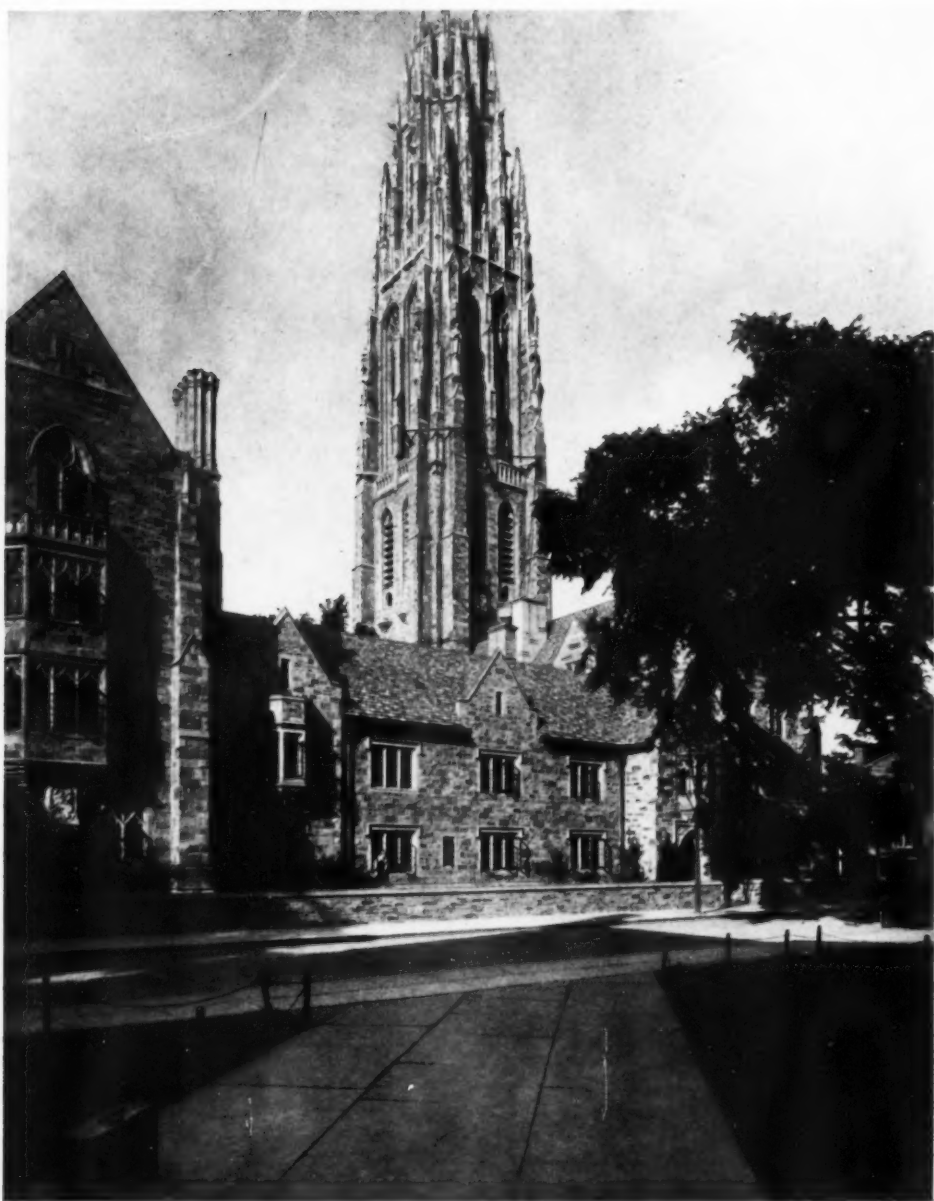




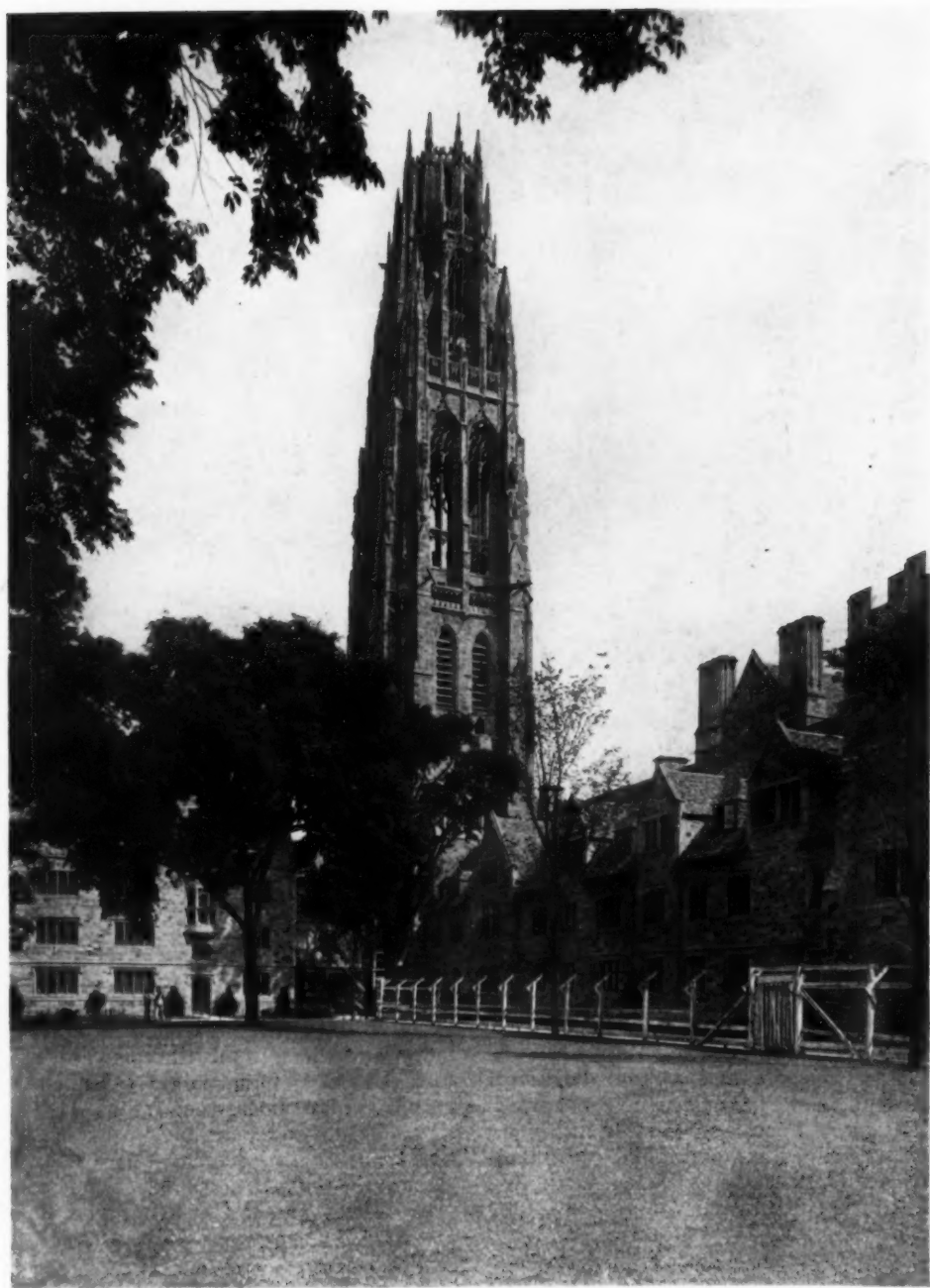
A CORNER IN KILLINGWORTH COURT—  
THE HARKNESS MEMORIAL QUADRANGLE AT  
YALE. JAMES GAMBLE ROGERS, ARCHITECT.



VIEW IN KILLINGWORTH COURT—THE  
HARKNESS MEMORIAL QUADRANGLE AT  
YALE. JAMES GAMBLE ROGERS, ARCHITECT.



HARKNESS TOWER, FROM LIBRARY STREET—  
THE HARKNESS MEMORIAL QUADRANGLE AT  
YALE. JAMES GAMBLE ROGERS, ARCHITECT.



HARKNESS TOWER, FROM BRANFORD COURT—  
THE HARKNESS MEMORIAL QUADRANGLE AT  
YALE. JAMES GAMBLE ROGERS, ARCHITECT.



TRACERIED WINDOWS ABOVE MOAT-WALL IN ELM STREET—  
THE HARKNESS MEMORIAL QUADRANGLE AT YALE.  
James Gamble Rogers, Architect.

dren of the Gothic order—deserve the attentive consideration that could be given in a separate paper. In this study of buildings he must love (the children showing it), one can only proffer one's gratitude. . . . Mr. Lawrie, will you not model a group of Yale Professors voting to reduce their own salaries, as, positively, they did, once did, when the college was poor and antique drives for its relief might have been held under advisement? That fact is in our traditions, perhaps unwritten or unpublished hitherto. President Dwight told me of it; but of course it has the brushwork of an earlier day. And it is Gothic. . . . I ad-

mit it is a typically *Cistercian*-Gothic incident; whereas our Quadrangle is not Cistercian, save that here and there it does win unsought respect by some rare survival of the Cistercian tradition. Those old lads, those worthies, had the Cistercian principle of self-abnegation exactly. If you like that Yale tradition, let me say it has, to me, the color and texture of our Quadrangle's seam-face granite. (I withdraw brushwork.) The stones will weather, generally, a bit lighter, as time passes, but the horizontal lines darker, increasing present contrasts. While the granite is weathering, I hope you will carve that Cistercian group.



*The*  
SPALDING SWIMMING POOL  
AT DARTMOUTH COLLEGE

RICH & MATHESIVS, ARCHITECTS



By LEON V SOLON

**W**HILE of recent years the swimming pool has been a standardized type of structure in so far as engineering construction and principles of sanitary maintenance are concerned, its development has now taken a new direction along which decorative treatment and coloring are endowing it with attractiveness and scenic quality. It is recognized as an essential item in the more pretentious clubs, recently built hotels, country estates and certain social institutions; there are even private houses in New York in which the basements have been sunk to a greater depth in order that the owners may enjoy a morning swim.

In the initial stages of the development of the swimming pool, the question of sanitary maintenance was the main pre-occupation; this focussed itself on water filtration, the choice of non-absorbent material for the lining of the pool, the revetment of the walls, and the treatment of angles with the object of easy cleansing.

We find the element of attractiveness now sought by practically all pool designers. Up to recently the Y. M. C. A. adopted the most uncompromising forms of sanitary treatment for their institutions throughout this country, spending very considerable sums in total for pools. Of late, through the activities of Mr. McMillan, of the Y. M. C. A. structural department, much thought and care have been lavished upon creating interest with color, and on achieving distinction in pro-

portion and design. A pool recently built at New Haven for the Y. M. C. A. by Murphy and Dana in association with Mr. McMillan, is an object lesson demonstrating the economic value of taste and design, where simple staple products are assembled for their color quality and their combined scenic effect. An excellent and interesting result has been achieved with a comparatively restricted appropriation, and the general purpose of the institution of which it forms an important item has been substantially benefited. It represents an unmistakable step forward, possessing a specific social value, by reason of the elimination of that repellant air and lack of the sense of welcome which formerly characterized the appearance of many popular institutions that were entirely or in part philanthropic.

The erection of the Spalding Pool, at Dartmouth College, commands our interest primarily by the spirit which actuated so munificent a gift. The donor, Governor Spalding, a Dartmouth man, desired that the structure should embody not only the highest degree of efficiency, but that it should charm the eye. The best of every tested method and contrivance has been incorporated to assure the smooth working of all accessory equipment, achieving an ideal condition in sanitary maintenance; complete success has rewarded the care and deliberation bestowed upon the problem by Mr. Keyes, the Business Director and former Art Professor of the College, and by the swimming pool

engineers, Messrs. Hasbrouck and King, the pool having now been in use for several months.

The architects of the building are Messrs. Rich and Mathesius. Mr. Charles Rich formed his initial connection with the College as a student, and for many years has been the college architect. Incidentally, it might be added, his reputation as one of the finest baseball players the College ever produced still survives in Dartmouth tradition.

The gymnasium, of which the Spalding Pool is an adjunct, was built about ten years ago; it is of quite imposing dimensions, measuring 360 ft. in length and 280 ft. in width. It contains a great hall in which football and baseball practice can be held simultaneously on the same floor. The value of such premises is inestimable to the standing of Dartmouth in intercollegiate games, as the exposure of the College site, set high in the hills of New Hampshire, is such that adverse climatic conditions might interfere with outdoor practice to an extent amounting to a serious handicap.

The internal dimensions of the swimming pool are 75 ft. in length by 30 ft. in width. As the pool has to be used for intercollegiate water-polo matches, it has been planned in such fashion that the regulation length of sixty feet has a minimum depth of six feet. In many pools, the shallow end extends into the 60-ft. area, with the result that the "backs" of one team are standing, which militates against that equality of conditions essential in match contests. The floor of the pool beyond the 60-ft. depth rises to a higher level, so that beginners may learn in safety.

The surface of the pool is lined with square  $\frac{3}{4}$ " ceramic tiles made of a speckled green vitrified material, which imparts a deeper tone to the water; material of the same character and size, flat and curved, in varying colors, is used for the handrail, scum gutter and pool edge, on which are distance marks with numerals. The perfect alignment and finish of the tile-covered handrail is an excellent example of the tile-setter's craft, in view of the difficulty of making a revetment

for so narrow and sharply curved a surface with such small units of tile. The promenade around the pool is covered with grey Ohio flint tile, a material that is highly vitrified and impervious to moisture; the units measure six inches square and are laid with a quarter-inch cement joint. This floor is finished with framing bands, running around the walls and pool; these are of a warm colored faience, glazed in Tuscan glazes corresponding to the coloring of the wall decoration. At irregular intervals an ornamental tile, similarly related, is introduced, to establish a decorative connection between floor and walls, which are of contrasting colors.

The general color plan of this interior consists of colors of opposite characteristics, conveying in the pool and promenade a sense of cool cleanliness by means of delicate greys and greens; a decided contrast is established in the mural treatment, where a sense of comfort is imparted with rich and mellow tones of browns, oranges and black, in the architectural and ornamental items, which are combined with panels composed of unglazed tiles of warm neutral tint.

As the visitor gets his first view of the great pool room, he is struck by the alluring freshness of the water and experiences an almost irresistible desire to go swimming, while the warm tones of the wainscot and rough plaster finish of walls and ceiling reassure those in whose minds qualifying doubts might arise.

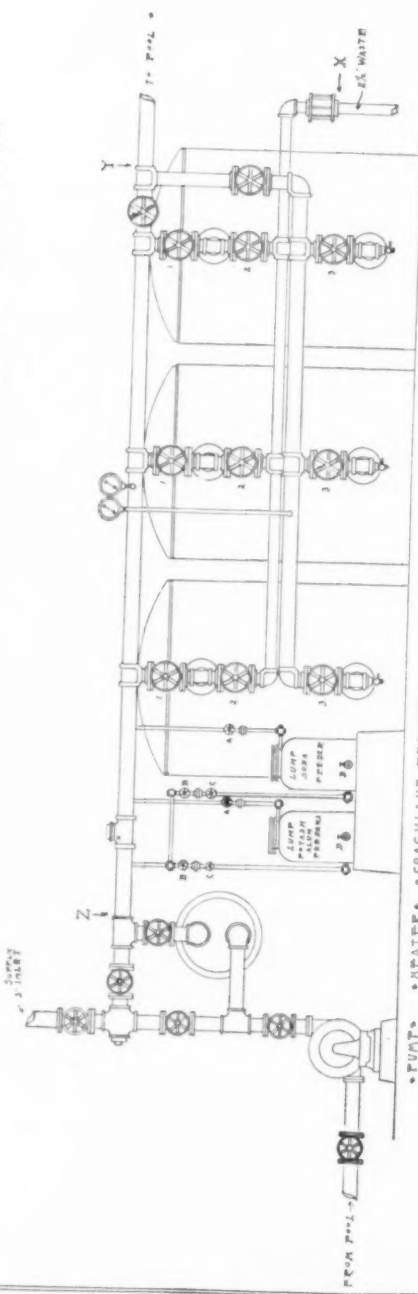
The trim which moulds the windows and frames the paneling of the wainscot is of a simple Renaissance leaf and bead design of slight projection. It is made of faience, colored in rich umber and black, the former tone prevailing; the umber having that wide range of tone and color quality which only the Tuscan glazes can produce. These glazes are developed in an extremely high temperature, and have been proved to be unaffected by both climatic extremes, or to wear by friction, having three times the resistance of the harder marbles. An ornamental band of Tuscan tiles caps the base at a height of 1 ft. 3 inches. The



GYMNASIUM AT DARTMOUTH COLLEGE, HAN-  
OVER, N. H. RICH & MATHESIUS, ARCHITECTS.



NOTE: FILTER-EQUIPMENT INCLUDES VALVES, PIPING, ETC. BETWEEN POINTS X-Y-Z.



• PUMP •

TO FULL - CLEAR VALVES A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, AK, AL, AM, AN, AO, AP, AQ, AR, AS, AT, AU, AV, AW, AX, AY, AZ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, BK, BL, BM, BN, BO, BP, BQ, BR, BS, BT, BU, BV, BW, BX, BY, BZ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, CK, CL, CM, CN, CO, CP, CQ, CR, CS, CT, CU, CV, CW, CX, CY, CZ, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, DK, DL, DM, DN, DO, DP, DQ, DR, DS, DT, DU, DV, DW, DX, DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI, EJ, EK, EL, EM, EN, EO, EP, EQ, ER, ES, ET, EU, EV, EW, EX, EY, EZ, FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FQ, FR, FS, FT, FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GG, GH, GI, GJ, GK, GL, GM, GN, GO, GP, GQ, GR, GS, GT, GU, GV, GW, GX, GY, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HI, HJ, HK, HL, HM, HN, HO, HP, HQ, HR, HS, HT, HU, HV, HW, HX, HY, HZ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN, IO, IP, IQ, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JQ, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KQ, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LL, LM, LN, LO, LP, LQ, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MM, MN, MO, MP, MQ, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NN, NO, NP, NQ, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OQ, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PQ, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QQ, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RQ, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TQ, TR, TS, TT, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UQ, UR, US, UT, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VQ, VR, VS, VT, VU, VV, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WQ, WR, WS, WT, WU, WV, WW, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XQ, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YY, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZQ, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ.

• HEATER • COAGULANT FEEDERS •

TO FULL - CLEAR VALVES A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, AK, AL, AM, AN, AO, AP, AQ, AR, AS, AT, AU, AV, AW, AX, AY, AZ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, BK, BL, BM, BN, BO, BP, BQ, BR, BS, BT, BU, BV, BW, BX, BY, BZ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, CK, CL, CM, CN, CO, CP, CQ, CR, CS, CT, CU, CV, CW, CX, CY, CZ, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, DK, DL, DM, DN, DO, DP, DQ, DR, DS, DT, DU, DV, DW, DX, DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI, EJ, EK, EL, EM, EN, EO, EP, EQ, ER, ES, ET, EU, EV, EW, EX, EY, EZ, FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FQ, FR, FS, FT, FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GG, GH, GI, GJ, GK, GL, GM, GN, GO, GP, GQ, GR, GS, GT, GU, GV, GW, GX, GY, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HI, HJ, HK, HL, HM, HN, HO, HP, HQ, HR, HS, HT, HU, HV, HW, HX, HY, HZ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN, IO, IP, IQ, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JQ, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KQ, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LL, LM, LN, LO, LP, LQ, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MM, MN, MO, MP, MQ, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NN, NO, NP, NQ, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OQ, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PQ, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QQ, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RQ, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TQ, TR, TS, TT, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UQ, UR, US, UT, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VQ, VR, VS, VT, VU, VV, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WQ, WR, WS, WT, WU, WV, WW, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XQ, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YY, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZQ, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ.

TO FILTERS.

TO FILTER CLOSE VALVE 2. OPEN VALVES 1 & 3.

TO WASH FILTER. CLOSE VALVE 1. OPEN VALVES 2 & 3.

WASH FILTER UNTIL WATER FLOWING RIGHT GLASS IS CLEAR.

HASBROUCK, KING & CO.  
SWIMMING POOL ENGINEERS,  
N°16 EAST 41<sup>ST</sup> STREET  
NEW YORK CITY.

MECHANICAL EQUIPMENT ARRANGEMENT.

SPALDING SWIMMING POOL IN GYMNASIUM AT  
DARTMOUTH COLLEGE, RICH & MATHESUS, ARCHITECTS.  
HASBROUCK-KING COMPANY, ENGINEERS.

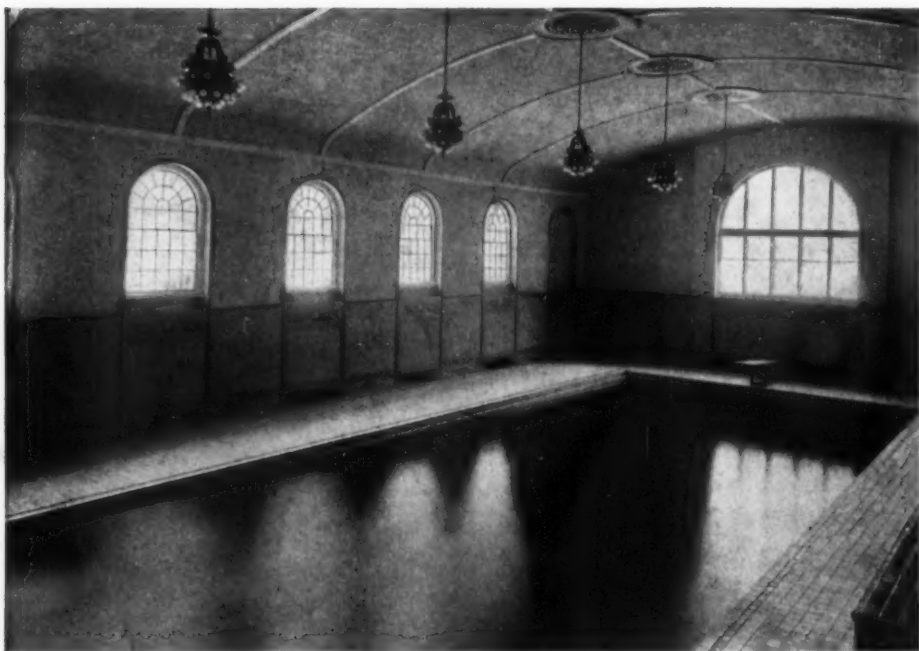


SPALDING SWIMMING POOL IN GYMNASIUM AT DART-  
MOUTH COLLEGE. RICH & MATHESIU, ARCHITECTS.





SPALDING SWIMMING POOL IN GYMNASIUM AT DART-  
MOUTH COLLEGE. RICH & MATHESIUS, ARCHITECTS.



SPALDING SWIMMING POOL IN GYMNASIUM AT DARTMOUTH COLLEGE.  
Rich & Mathesius, Architects.

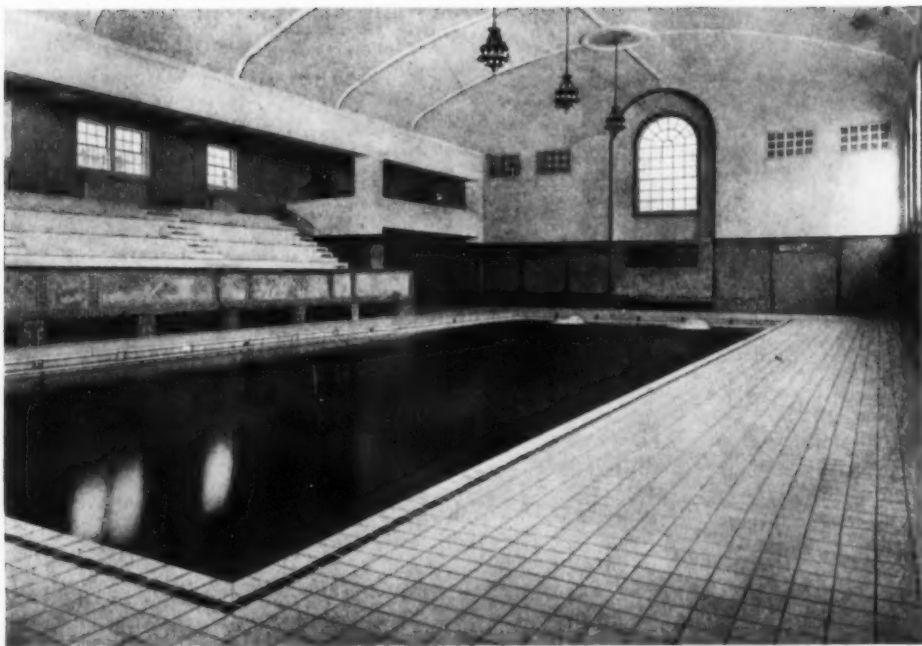
the Spalding Pool to the College at one end of the hall; at the opposite end, the dolphins arranged in frieze-form fill a space beneath the great windows.

The engineers have avoided a procedure when constructing the cement containing-walls of the pool, which has proved detrimental to the waterproofing of many such structures, as a result of pouring the cement in successive operations. In this pool the floor and walls were cast in one operation, the pouring having taken eighteen hours to complete, the walls being nine feet high and eighteen inches thick. They have also eliminated another very detrimental factor, by devising a new method for constructing the forms in which the cement is poured, which dispenses with all wires which are generally used to counteract the lateral weight pressure of the newly poured cement. These wires naturally disintegrate by rusting, ultimately leaving holes penetrating the walls, to the great detriment of waterproofing, causing water pressure behind the containing walls.

Water filtration is an extremely important factor in pool planning. The system installed here, which we illustrate, consists of three pressure filters, measuring five feet in diameter. This is described as the three-group system, contrived to facilitate the cleansing of the filter beds in each unit periodically, without interfering with the constant process of purifying the contents of the pool. The washing of the filter is performed in the simplest possible manner, by reversing the direction of the intake, the water then passing out into the sewer after washing the filter. Filtered water is used for this purpose in preference to water from the main, which is always to a certain extent impure, causing a degree of contamination which would remain in the filter; the filtered water for washing is passed through at a predetermined temperature in order that the filter beds may not be chilled previous to resuming operation. This method is so efficient that it is unnecessary to change the water for many months, whatever the degree to which the



SPALDING SWIMMING POOL IN GYMNASIUM AT DART-  
MOUTH COLLEGE. RICH & MATHESIUS, ARCHITECTS.



SPALDING SWIMMING POOL IN GYMNASIUM AT DARTMOUTH COLLEGE.  
Rich & Mathesius, Architects.

pool is used for swimming; in fact, from the standpoint of purity, it need not be replaced for ten or eleven months, with the water in daily use; only that quantity of water which splashed over the scum gutter or is used for filter washing has to be made up, evaporation being a negligible factor. Constantly filtered water tends to depreciate in one respect only, viz., in its degree of alkalinity. To remedy this deficiency soda is added in fixed proportions by means of an item of equipment in connection with the filtration plant. The color of the water has also been a subject for study, as the majority of sources tend toward a brownish tone; this is rectified by the addition of alum, which has the property of clarifying water, being added, like the soda, during the process of purification.

The maintenance of a uniform temperature in the water is automatically controlled by means of live steam at five-pound pressure, in an instantaneous heater, worked in connection with the filtration plant.

The installation which we illustrate completely renovates the contents of the pool twice in twenty-four hours; the operation is constant. The final stage of the circuit is that of sterilization as the water leaves the filters to return to the pool; chlorine is the chemical used, having proved more efficient than any other for this purpose.

This pool has been arranged with one effluent drain only, planned on a unique principle devised by the engineers, which reduces to the minimum any difficulty that might arise from a stoppage of the waste pipe.

The shower-room is a luxurious adjunct to the pool. The walls and ceiling are faced with a hand-made faience tile with a cream colored glaze. The shower fixtures are attached to marble slabs; these are easily removable in the event of any defect arising in the plumbing. Each of these slabs and each doorway is framed with a decorative faience border of cloisonné glazes, in blue and white on a blackish ground.

# BASILICA OR TEMPLE

By Benjamin Ives Gilman

A GENERATION ago the accepted type of railway terminus was an immense arched shed closed at one end by offices and open at the other for the passage of trains. Today the noisy and noisome arched space has disappeared and been replaced by a series of low shelters over individual platforms, while the offices that closed one end have developed into the station proper, with concourses rivalling in size the train sheds of long ago.

An equally radical change will, I believe, lead to the definitive form of the public museum building. The temple type hitherto accepted without question is about to be abandoned for a basilica type.

One of these types is Greek in origin, the other Roman; and it is curious that the Greek type bears the Roman name among us and the Roman type the Greek name. *Templum* (space set apart) is Latin; *basilica* (royal place) is Greek. But the original uses of the two buildings are *prima facie* evidence that the Roman basilica and not the Greek temple is the type foreordained for museums. For the temple was the abode of the god, and his worshippers gathered before it without entering; while the basilica was a roofed-in forum, from the start the meeting-place of the people for public purposes, at first secular and from early Christian times sacred. The temple was a small building with blank walls surrounded by a row of columns and provided with a door, but containing, as far as is certainly known, no special opening for the admission of light. The basilica, on the contrary, consisted of a central hall with high windows, called a clerestory, admitting light over a surrounding ring of lower apartments, themselves

lighted by external windows. In the early Christian basilicas, the suite of lower apartments was sometimes in two stories and sometimes in two divisions, the inner forming an aisle between columns, as in St. Paul outside the walls at Rome.

When, a century ago, buildings began to be erected especially for museum purposes, it was the temple type that was chosen and the question of its lighting was solved by openings in the roof. Nevertheless, under the pressure of practical needs the ground plan was developed toward that of the basilica; and the typical museum came to consist of a large space surrounded by a single or double row of apartments used as galleries. Usually there were two such spaces separated by an entrance and stairway hall. In one fundamental particular the developed form retained the impress of its origin. Its light continued to be derived mainly from overhead, the interior spaces being at first treated as courtyards and later made into galleries by roofing them in with glass. The blank external walls remained, and, with the low dimensions of the structure and the glass skylights indicating overhead lighting, are still the most characteristic external features of the prevalent museum type.

In parts of museums meanwhile, the clerestory had occasionally been used, as at the Kelvingrove Museum at Glasgow (1893), and elsewhere before and since; and in 1911, in an article entitled "A Museum without Skylights," contributed to "Museumkunde," I proposed to apply clerestory, studio, or (as I have ventured to call it) "attic" lighting to all the exhibition spaces of a museum, exterior and interior alike, through the use of the basilica scheme. The genesis of that article and another which followed it in the Architectural Record in 1915 is instructive at the present turning-point in the development of museum architecture.

The plan of the present Museum of

This article, "Basilica or Temple," by Dr. Gilman, of the Museum of Fine Arts in Boston, is reprinted from *Museum Work*, for December, 1920. By permission.



Fine Arts in Boston (1907) was the subject of much study for several years by all of those connected with the museum administration. The result was a building in which the proportion of windows to skylights was much greater than had before been customary. There was another feature incorporated in the plans which was also the result of much experience and observation. The ground plan of the central block of the Museum—two large courts separated by an entrance stairway hall and surrounded by a double row of exterior spaces—may be called the standard museum plan. But in adapting it to the needs of the Boston collections the lower floor was varied by reducing the inner of the double row of spaces about the courts to a corridor. This had already been done at the Chicago Art Institute (1893), the Museum at Cologne, Germany (1897) and doubtless elsewhere.

The advantages of both provisions were manifest as soon as the new building came into use. The predominance of sidelighted rooms gave both floors a friendly air in marked contrast to the somewhat mausoleum-like effect for which the customary top-lighted museum has always been criticised. The corridor surrounding the courts gave a most desirable freedom of movement through the lower floor. Any room could be set off or temporarily closed without preventing access to any other.

Besides these expected advantages, the experience of the building brought an unexpected result. The best galleries in the whole Museum proved by common admission to be the large top-lighted courts. Here the light openings were so high (about fifty feet) that the illumination seemed to come from nowhere. Yet it came in sufficient quantity and at a good angle to show every kind of exhibit to good effect. A serious defect still remaining was brought all the more prominently into view. On many winter days clinging snow covered the skylights, and until it melted or was removed, the courts were immersed in deep twilight, while the sidelighted rooms adjoining were as bright as ever. As one of these courts

was in my charge, I was impressed by the fact that its customary admirable lighting might have been preserved at all times had the court been a nave with clerestory windows and a solid roof.

The discontent with toplight which this observation awakened was transformed into positive opposition by a subsequent observation of a different kind. In looking over a mass of illustrations of top-lighted galleries in Europe, gathered during the studies preparatory to the new building, I gradually came to feel a certain vulgarity of effect in all of them. Vulgarity of effect is a sure sign of something that pretends to be what it is not. How did a top-lighted gallery produce this effect? Evidently, by pretending to be an interior when it really is an exterior. The essential feature in any place meant to live in is a solid roof. An apartment without an opaque ceiling is not a room to live in, but a small courtyard to pass through, partaking of the nature of the "wells" common in large buildings. When we furnish and use it as a gallery for the preservation of perishable contents, we make it pretend to be the dwelling-place it is not. Hence the vulgarity of effect that the illustrations of European top-lighted galleries disclosed when inspected *en masse*.

On the spot I abjured toplight. In the enthusiasm born of the new faith, it was easy to fancy the central block of the Boston Museum building transformed into a sort of double basilica; of which the courts were the naves, lighted from clerestory windows; the corridors, borrowing light from the nave, were the aisles; the suite of external galleries the ring of chapels, lighted by windows high up against the ceiling; and the space over the central stairway a lantern, such as crowns the crossing of nave and transepts in many cathedrals. The result of this fancied transformation of the Boston building was the Museum without Skylights described and illustrated in the article in "Museumskunde" in 1911. The accompanying Figure 1, showing the external scheme of the building, prefaced that article.

The two fundamental needs of any



museum building are good lighting for exhibits and free passage for visitors. The basilica form of the Museum without Skylights furnished both. Every exhibition space had the high side lighting called studio light because artistic *par excellence*. The corridors corresponding to the aisles of a basilica were sufficiently lighted as passages by borrowing from the nave, and permitted free access to every room without entering any other.

Two other needs less fundamental were not as well met by the Museum without Skylights. These are the ease of the visitor and the indefinite expansibility of the building.

Doubtless all museums possessing, like the supposed Museum without Skylights, a monumental stairway to the chief gal-

lery. The result of accepting both suggestions was the basilica scheme of which I gave drawings and a description in an article with the title "Glare in Museum Galleries," published in *The Architectural Record* in 1915 and reprinted with the article of 1911 on "A Museum without Skylights" in my volume, "Museum Ideals," in 1918. The accompanying Figure II reproduces enlarged and abridged tracings\* from two of these drawings.

This scheme has not yet been incorporated in the design of any museum. But it became last year the basis of a design for a Small Museum presented before the American Association of Museums by Mr. Meyric R. Rogers and since published by him in *The Architec-*

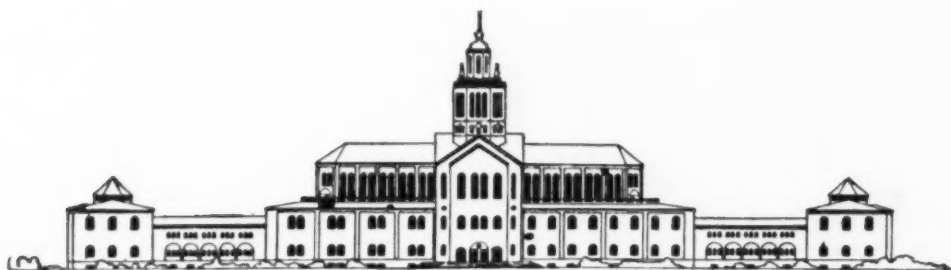


FIG. 1. A MUSEUM WITHOUT SKYLIGHTS

Scheme of Elevation: from *Museumkunde*, 1911

leries, have made the experience that time has brought the Museum in Boston; the experience, namely, that many visitors lose themselves on the ground floor and miss, until perhaps too late, the main exhibits of the Museum. How would it answer to exchange the rôles of the two floors, putting the chief galleries on the ground level, the subsidiary collections and offices above, and substituting smaller stairs for the single monumental stairway?

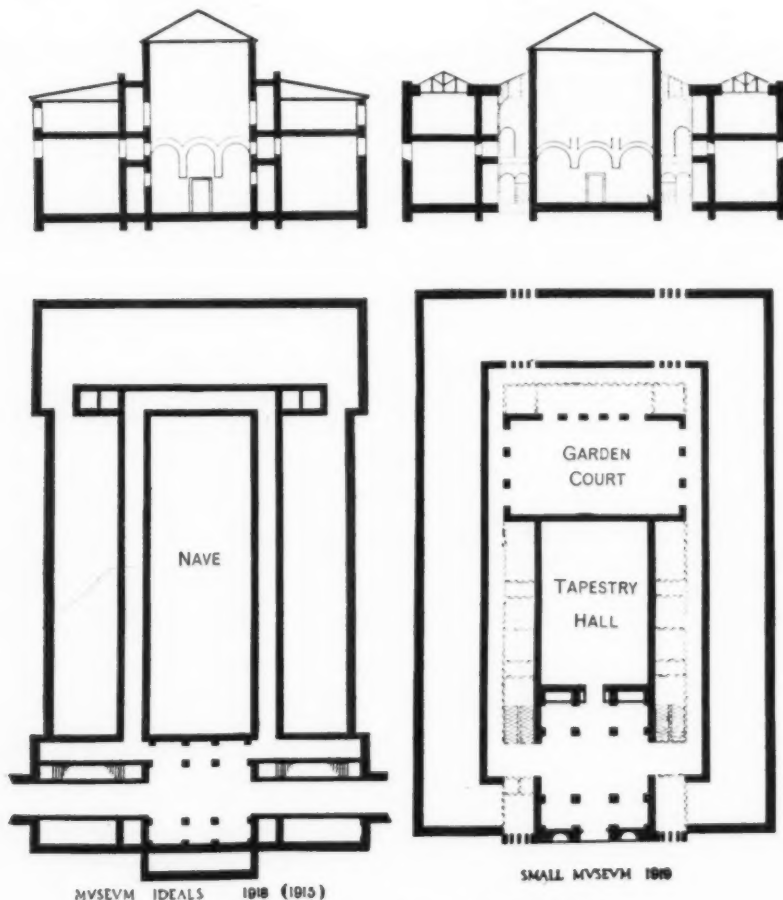
Further, the plan of the Museum without Skylights consisted of two symmetrical halves. How would it answer to use one of these as the germinal unit of a group of like buildings to be connected by external corridors?

*tural Record* for December, 1919, and *Museum Work*, for May, 1920. Figure III reproduces enlarged and abridged tracings\* from the cross-section and main floor plan of the "Small Museum" as published in *Museum Work* with the portions added by Mr. Rogers to the scheme of "Museum Ideals" indicated by dotted lines. Mr. Rogers' description of the "Small Museum" mentions the Museum at Cleveland as the source of certain of its basement arrangements, but does not refer otherwise to any previous design. Figure IV shows the relation of the general scheme of the "Small Museum" at once to the Temple plan of the Cleveland

\* By Mr. W. R. Dougherty, Assistant Instructor in Drafting, Wentworth Institute, Boston.

Museum and the Basilica scheme of "Museum Ideals." The figure consists of a tracing from the scheme of "Museum Ideals," another from the plan of the Cleveland Museum with all details omitted from both; and a third outline

Figures II and III already show; second, that the scheme contains, instead of the nave of "Museum Ideals" a tapestry hall and a garden court of approximately the dimensions of those at Cleveland; and third, that the partition of



FIGURES II and III. TRACING WITHOUT DETAIL

formed from these two by cutting the tracings from "Museum Ideals" into three parts lengthwise and replacing its nave by the two courts of the Cleveland Museum, the garden court placed crosswise instead of lengthwise. These outlines serve to make plain three facts: first, that the general scheme of the "Small Museum" is that of "Museum Ideals" divided lengthwise into three parts, as

the scheme of "Museum Ideals" is required if the garden court is placed crosswise as in the "Small Museum," instead of lengthwise as at Cleveland.

Notwithstanding the ingenious and charming details in which the design for a "Small Museum" abounds, it is impossible to approve it as a whole. A sound result cannot be reached by the dislocation of one established architectural type

in the interest of another radically different. The basilica was a wonderfully clever solution of the problem of lighting a building of great area, a problem altogether foreign to the purposes of a temple. First the central portion is raised and provided with windows clear of the surrounding roof. From its outward resemblance to a boat upside down, this portion is called a nave. The surrounding area proves to be least well lighted at its inner edge next the nave, and this is made use of for a passageway. Thus the aisle is born, leaving the rest of the outlying space well lighted from its windows for the essential purposes of the building. These thoughts of genius go for nothing if we then proceed to move the aisle into outer darkness away from the nave. The spaces inserted in its place, in part without light or air except from doorways and ducts, and on the second floor from skylights, introduce the spirit of the Greek temple among the airy and sunny basilica elements on either side, as spots of oil might float on water. In longitudinal section the exterior of the "Small Museum" announces the same incongruity by its juxtaposition of a curtailed clerestory with a courtyard roof. Again, in the proposed extension of the "Small Museum," the basilica ideal of free communication appears to be dropped and that of natural lighting is

still further disregarded. An axial corridor appears to replace the circuit passage of the parent building; and were the extensions complete, two principal galleries on the main floor would become interior spaces lighted in Greek temple fashion only through doorways.

There was, nevertheless, no reason either for cutting up the basilica type in order to get a garden court or for giving it up in order to provide for easy extensions. An atrium or cloister about a garden area is a consistent and not infrequent sidewise adjunct of a structure of the basilica type. The scheme of "Museum Ideals" provides corridors correctly placed for continuation as such cloisters about garden courts, and these cloisters could be flanked externally by a range of galleries when necessary. Extended in this way, no part of the scheme of "Museum Ideals" would require artificial illumination. Remaining a museum without skylights, the building would yet be open to the day in every room.

In a word, to turn a part of a nave into a court is an architectural solecism likely to yield untoward practical results, as the design for a "Small Museum" shows. . . . The basilica type meets every museum need that is met by the temple type; and its dismemberment or abandonment to produce a hybrid is neither desirable nor necessary.

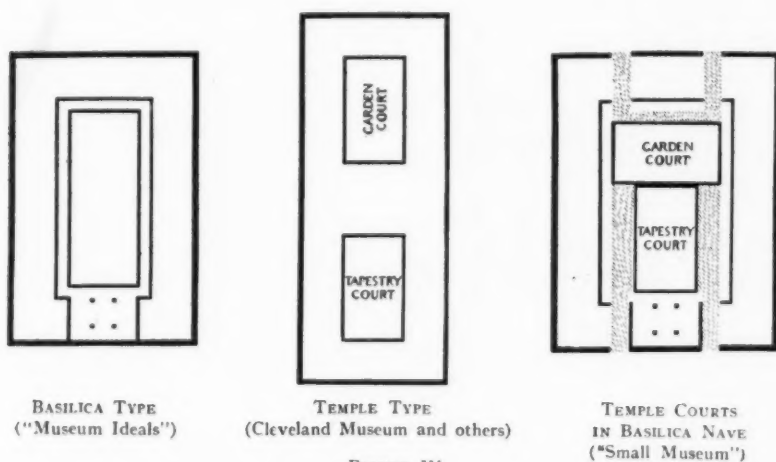


FIGURE IV



FIG. 35. APARTMENT HOUSE AT 140 MT. VERNON STREET,  
BOSTON, MASS. RICHARD ARNOLD FISHER, ARCHITECT.

# TENDENCIES IN APARTMENT HOUSE DESIGN

## PART IV - BUILDINGS ON NARROW SITES

~ Continued ~



By FRANK CHOUTEAU BROWN

LAST month we considered the simplest, most fundamental type of apartment house arrangement, predicated upon its availability to the commonest type of city lot,—that with a narrow frontage on the street and considerable depth. The next logical step along the selected line of progress is to consider other possible variants of plan available on this same—or the next slightly larger—area of lot.

The plan types that have been selected for illustrative purposes have been grouped on the "lot" basis rather than the type of plan, because all apartment house developments start, of necessity, from the kind of lot that is to be improved, rather than from a fixed idea as to the kind of apartment that is to be built. Even granted that the owner or developer of the property has, in the first instance, some quite definite idea as to the kind of apartment he is desirous of building, and selects his lot most carefully with that point of view in mind, yet the fact remains that the architect has finally to study the problem with the idea of obtaining the most use and income from the available area and proportions of the lot thus obtained,—and so, as a matter of practical fact, we arrive once more at the lot, its size and proportions, as establishing the final limitations and requirements with which the arrangement and disposition of the plan has ultimately to be brought into accord.

For convenience in discussing or composing the different apartment house plans gathered for consideration in these articles, they have been grouped in the following manner. First, the type that was and is still most common, the long

narrow thin plan, adapted to the ordinary narrow city lot, has been considered. This plan has several possible modifications. First would be the simplest form, such as was shown last month in Fig. 26, for instance, where the single apartment extends from the front to the rear line of the property and covers the entire width of the lot between party walls. Second comes the most obvious modification, accomplished by dividing the lot into two nearly equal parts and making two smaller apartments on each floor, one entirely across the front of the narrow lot, the other across the entire width of the lot at the rear. This form of plan may be made to fit the narrow single house lot, the same as Fig. 26 in proportion, when each apartment would be of about half the number of rooms of the single apartment there shown,—or it is even better adapted to a lot of somewhat wider width, as is this month excellently illustrated by Figs. 35 and 37.

Considered as a matter of investment return, it is generally found that the smaller apartments (placed two to the floor) will each bring in considerably more than half the rental of the larger apartment. The exact proportion of increased value of the smaller apartment over the larger cannot be exactly stated, but the larger the city and the more conveniently located the apartment, the larger the increase, until we find that, in a crowded city such as New York, it is frequently the case that the owner expects and receives for the smaller apartment as much as or sometimes even a little more than he would obtain for the larger apartment covering twice as much area. These larger rentals can as a rule only be ob-



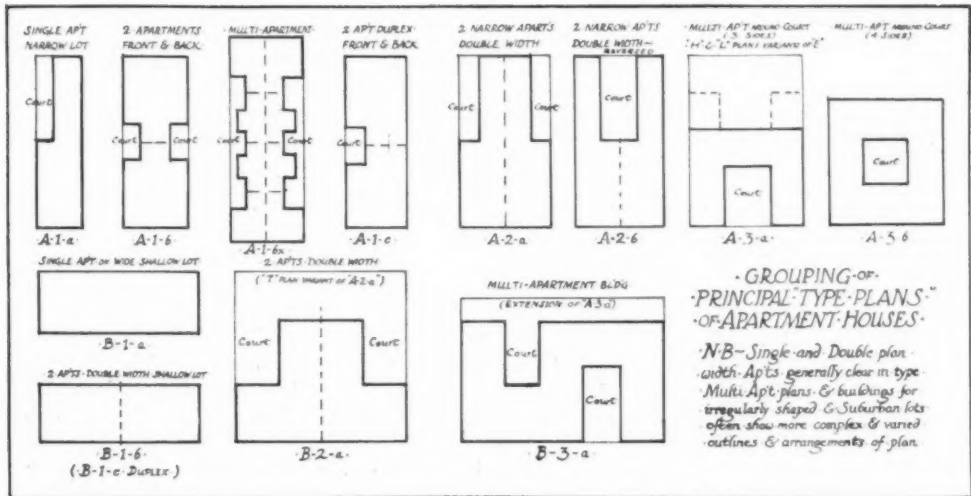


FIG. 36. PRINCIPAL APARTMENT HOUSE "TYPE PLANS."

tained for the more conveniently located apartments, in near-fashionable locations; or in those more accessible yet pleasant down-town near-business or shopping streets that are yet quiet enough for family living quarters, or in suites for exclusively bachelor occupation.

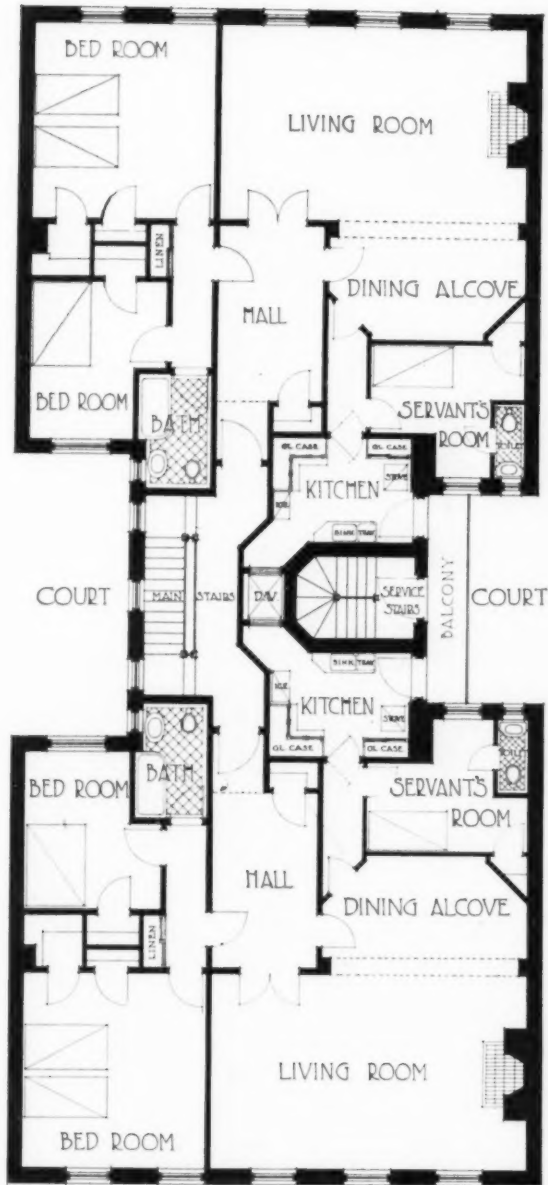
It must also not be forgotten that the cost of building the two apartment to the floor plan amounts to somewhat more in the first place than the larger single apartment. Generally it requires more bathrooms; in the smaller types it sometimes doubles the number in the building, and in a living apartment it of course means double the number of kitchens—although they may be smaller in size. In other words, the installation cost of the plumbing is about doubled—although but little difference is made in the other structural elements.

Still other variations of this type of plan must be recognized. The number of rooms per apartment may sometimes best be obtained by arranging each floor into a "duplex" type of plan; that is, dividing the depth of the narrow lot in the center and placing half the large apartment upon one floor, and half upon the floor above. ("A-1-c."—Fig. 36). This is of course usually accomplished by placing the living rooms upon one floor and the sleeping quarters upon another. Gen-

erally the living quarters are upon the lower floor of the two, but this is not necessarily the better arrangement. We shall later be able to show an example of this type of apartment plan where the living floor has been placed *above* the floor containing the sleeping rooms because of the distinctly better outlook for the living quarters thus obtained.

The single apartment on the narrow lot—such as is indicated in the group of type floor plans in Fig. 36 at "A-1-a," for instance—may have substituted for its long narrow plan either two apartments to the floor—one at the front and the other at the back of the lot, each of about half the number of rooms of an equal area—"A-1-b," Fig. 36),—or it may be divided in the center of its depth, and a duplex apartment be placed upon two floors at the front and another upon two floors at the back. In the former instance the cost of the construction and equipment of the building would be slightly increased—by about the expense of doubling of plumbing fixtures that would thus be required—and at the same time the income from the rental of the smaller apartments (at some considerably larger amount than half the rental of the larger apartment) would probably bring in a still greater income from the property.





## TYPICAL FLOOR PLAN

SCALE FEET

FIG. 37. FLOOR PLAN, APARTMENT HOUSE AT  
140 MT. VERNON STREET, BOSTON.  
By Richard Arnold Fisher, Architect.

Other things being equal, this plan might also result in rooms of a slightly larger area and size, because of the saving in long corridor space. Of course, such a division of the lot in depth could not be undertaken unless the rear of the lot possessed some advantages of exposure, quiet, or attractive view or outlook, that would warrant the placing of the living rooms upon this portion of the property.

An excellent example of the compactness of plan that may result from such an arrangement is shown in Fig. 37. The fact that this particular lot is somewhat wider in proportion to its depth than the narrow city lot first contemplated does not affect the main facts in the case,—although of course it does to some extent vary the details of the arrangement of the plan. In this case the lot extends entirely through a shallow city block, and so possesses two frontages upon streets, and although the rear street is a quiet cross street of only a block in extent, it provides both a southern exposure and an attractive outlook. The entrance to the building as a whole is, of course, retained upon the more important street at the front. The area of this shorter, wider lot is somewhat less than was the case in the plan shown as Fig. 26 last month, yet both may nevertheless be studied with advantage as typical of the two kinds of lot usage. If this two apartment to the floor plan, one front and



FIG. 38. NOS. 140 AND 142 WEST 55TH STREET, NEW YORK CITY. SCHWARTZ & GROSS, ARCHITECTS.

one back, were to be used with the very narrow, deep lot shown previously, the bedrooms would be thrown to the back of the living rooms, on the court, instead of being placed on the street front from beside them, as is here the case. The latter arrangement undoubtedly offers a pleasanter, more desirable plan, commanding higher rentals, when the street frontage required is obtainable for use in this way.

One other detail in the plan arrangement must also be noted—the definite manner in which the two bedrooms and the bath to serve them are placed in a clearly defined and separated rectangle, self contained within its own walls, at one side of the space devoted to living accommodations.

The exterior of this building (which is also duplicated—with the exception of the entrance doorway—upon the rear street façade) shows a straightforward and simple use of an economic material and a local historic style, in a way that depends upon good proportions, simple and inexpensive materials, and well controlled design for its success—a very commendable set of virtues in a field where architect and owner are both somewhat too

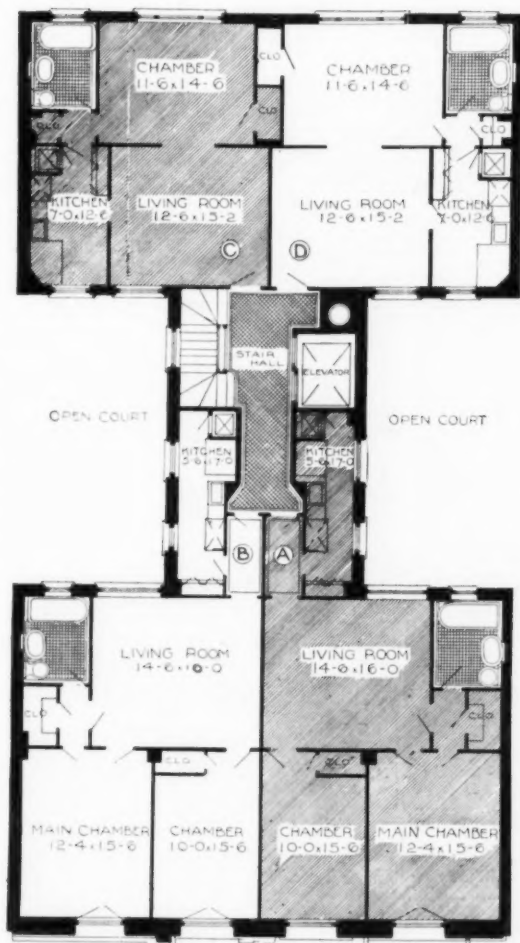


FIG. 39. TYPICAL UPPER FLOOR PLAN—NOS. 140 AND 142 WEST 55TH STREET, NEW YORK CITY. Schwartz & Gross, Architects.

likely to regard pretension and ostentation of design as necessary to the attraction of tenants.

Figs. 38 and 39 illustrate another development of a lot of still wider frontage, but of rather similar proportions, in this case carried out with two smaller apartments on each front, the two on the front street being of three rooms, bath and kitchen, and the two on the rear each having two rooms, bath and kitchen conveniences. The similarity of the general arrangement to the previous plan is at once apparent. It is a straightforward, compactly arranged scheme, and the fact that the floor plan

is duplicated many more times in the nine story (instead of a four story) structure, in no way alters the application of either plan-arrangement to other problems, for buildings higher or lower, as the case may be.

Another illustration is Fig. 41, provided by the other New York apartment building, placed upon a still larger lot, and employing a larger apartment scheme. Here the two apartments placed across the front of the building have each five principal rooms, the only difference occurring in the variation in the servants'



FIG. 40. NO. 122 EAST 76TH STREET, NEW YORK CITY. SCHWARTZ & GROSS, ARCHITECTS.

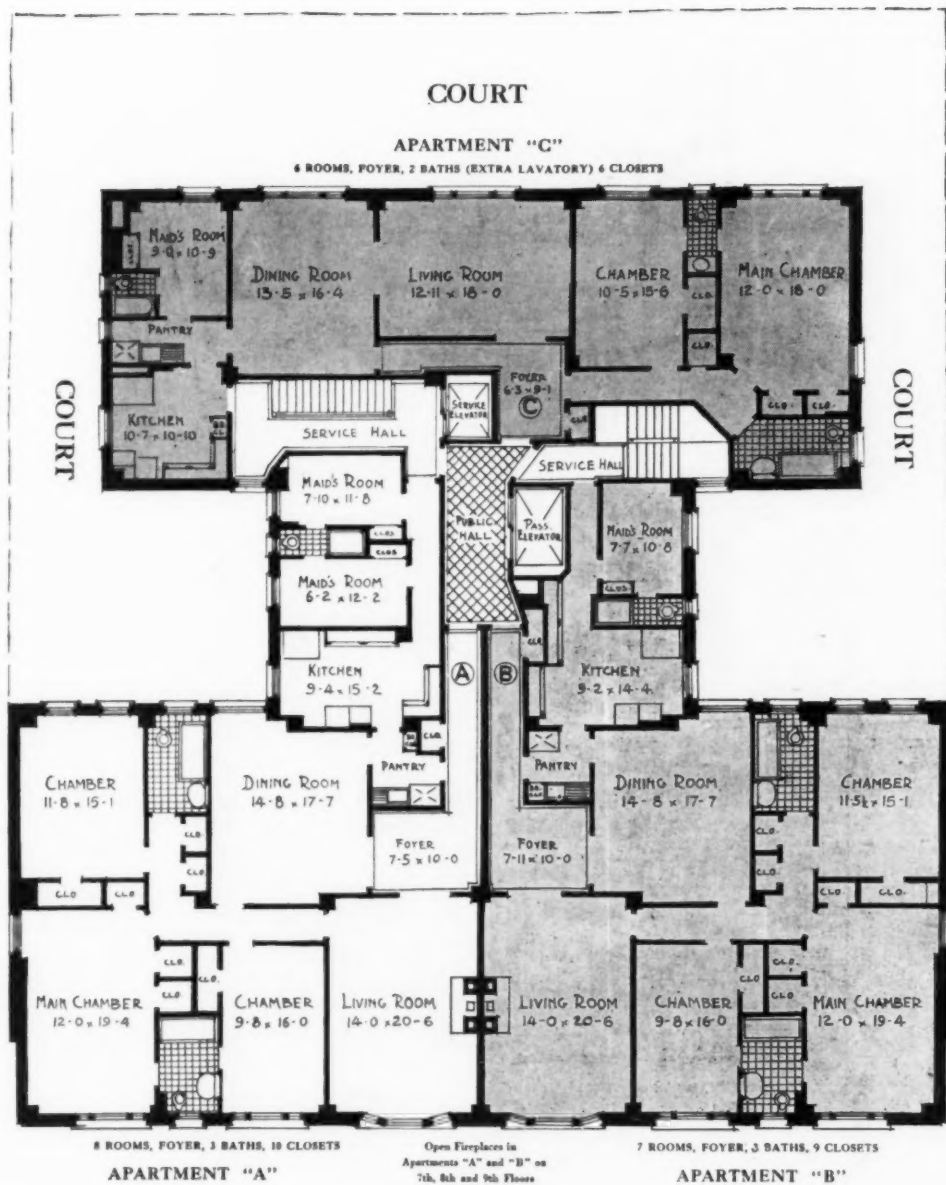
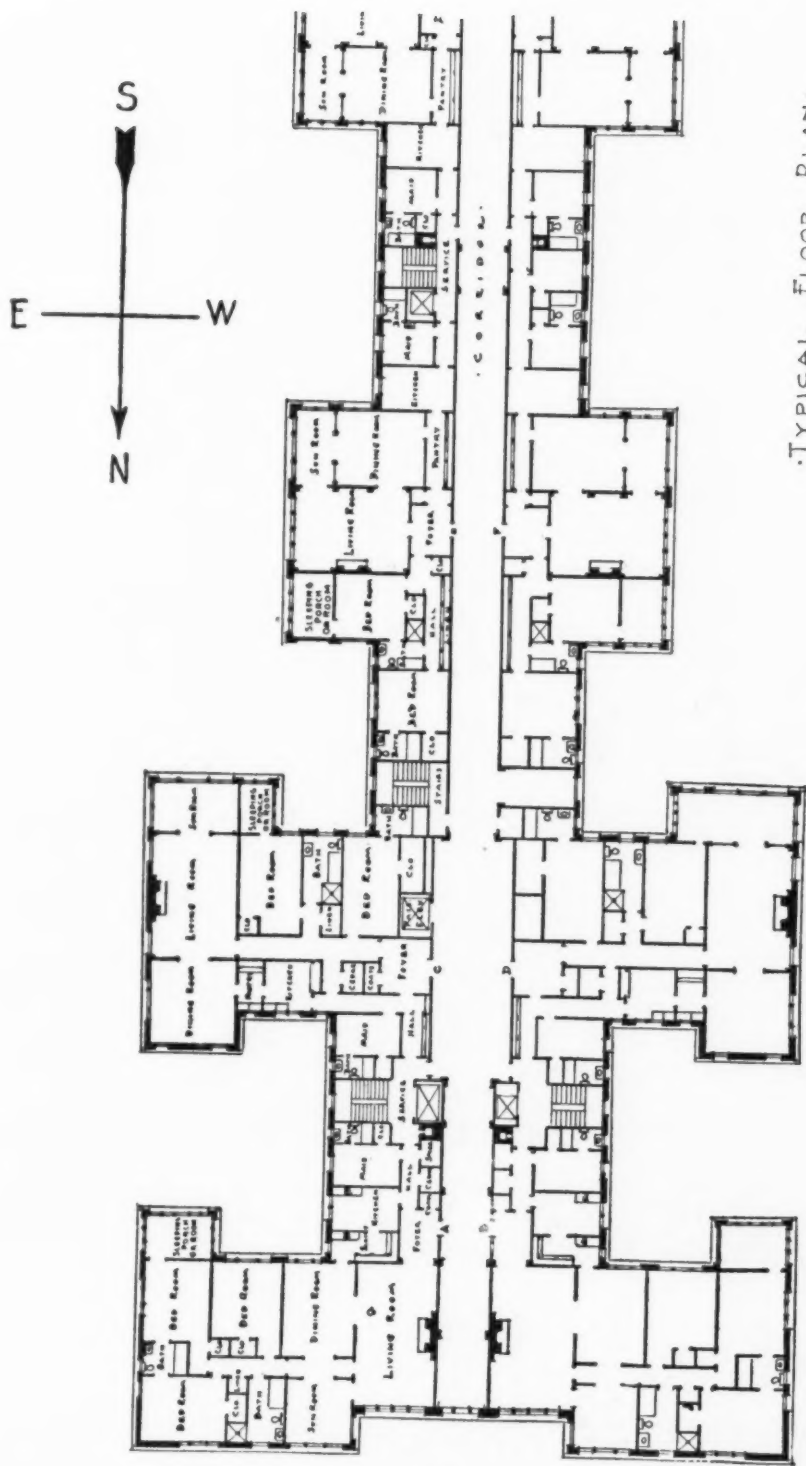


FIG 41. TYPICAL UPPER FLOOR PLAN—NO. 122 EAST 76TH STREET, NEW YORK CITY. SCHWARTZ & GROSS, ARCHITECTS.



FIG. 42. PERSPECTIVE DRAWING—APARTMENT  
HOUSE AT 1700 JEFFERSON EAST, DETROIT, MICH.  
ROGERS, BONNAH & CHAFFEE, ARCHITECTS.





·TYPICAL FLOOR PLAN·

FIG. 43. PART OF TYPICAL FLOOR PLAN, THE RE-MAINER HAVING THE SAME ARRANGEMENT—APART-MENT HOUSE AT 1700 JEFFERSON EAST, DETROIT, MICH. ROGERS, BONNAH & CHAFFEE, ARCHITECTS.



FIG. 44. NO. 420 WEST END AVENUE, NEW YORK CITY. SCHWARTZ & GROSS, ARCHITECTS.





FIG. 46. NO. 930 PARK AVENUE, SOUTHWEST CORNER OF 81ST STREET, NEW YORK CITY. SCHWARTZ & GROSS, ARCHITECTS.

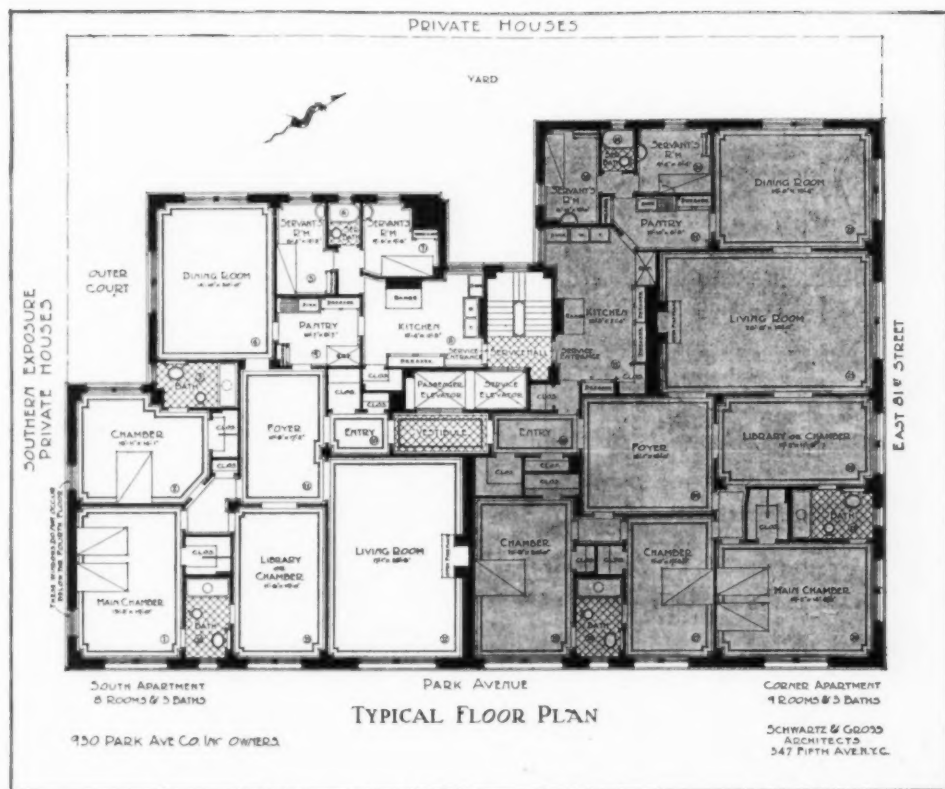


FIG. 47. TYPICAL FLOOR PLANS—NO. 928 PARK AVENUE, SOUTHWEST CORNER OF 81ST STREET, NEW YORK CITY.  
Schwartz & Gross, Architects.

rooms, one being provided in the one case and two in the other.

At the rear, the fact that the lot was shallower than in the case of the previous examples has made it necessary to run the rear apartment entirely across the back of the building, and even then it possesses only four principal rooms, as against five in the case of the two front apartments. The plan of this building has been considerably complicated by the need of providing two rear staircases and a service elevator. If there had been two apartments in the rear, no more service staircases would have been required, although another service elevator would have been needed to avoid the necessity of the servants passing across the main hall directly in front of the entrance doorways to the rear apartments, as

is the case in the present plan. Another minor defect would seem to be the narrow passageways through which entrance from the main hall is made to the front apartments. This space would have been better left in the public hallway, which would then have been more spacious. At the same time the entrance to the "foyers" of the front apartments would have seemed more direct and comfortable.

One other principal development of the general type of plan being discussed in this article, is also to be recognized; the employment of this same plan-scheme upon a much larger scale than we have yet considered. This development may well be illustrated in an unusually extreme example, that has but recently been completed on a site in Detroit.

This building is also an excellent example of what is likely to develop in the West, as their particular kind of expression of the "De Luxe" type of apartment that, in both New York and Chicago, has taken a more decidedly urban expression. It also well illustrates exactly how the "type-plans" that have been here grouped together, on the basis of their mere essentials of plan-scheme, are capable of extension to a degree that is well illustrated by this particular building. In the key plans in Fig. 36, this plan is represented by "A-I-bx" and its immediate relationship to the last plans we have been considering, Figs. 39 and 41, should be easily seen. The only difference is that the *idea* of the plan in Fig. 39, for instance, is here merely extended, and repeated, further and further backward until it is, as a matter of fact, duplicated three complete times.

The plan as reproduced in Fig. 43, does not show the full extent of the depth to which the building was built, because its length was so great that it could not clearly be reproduced upon this magazine page. The actual middle of the length of the building occurs in the service stairs shown on this plan opposite the letter "W" in the compass indication at the upper right hand corner. Right and left of this center line, the plan of the building is duplicated in arrangement, so that it contains on each floor twelve apartments, six on each side of the long central corridor, each apartment being indicated by the "ell" extending toward each side, the division between the apartments occurring in each case somewhere near the middle of the courts that separate them and provide exposure, light, and air to the rooms on both sides. One of the best and most expensive residential suburbs of Detroit is that known as "Grosse Pointe," beautifully wooded and planted, and containing handsome and expensive homes, and it is on one of the lots, 153 feet wide, and 900 feet from Jefferson Avenue down to the bank of the Detroit River, that this building has been placed.

The building is set back from Jefferson Avenue seventy-five feet at the entrance end (further back than many of the resi-

dences themselves) and the river front is about three hundred and thirty feet from the bank, so that the structure itself is about five hundred feet long, and occupies only about 42 per cent. of the lot area—the remaining 58 per cent. being given to the necessary driveway approaches, landscaping, and garden treatments indicated on the perspective drawing reproduced. A private driveway to the street entrance also extends down the west side of the building to the river front, where a large circle, between the entrance to the building on that end and the river bank, surrounds an elaborate Italian garden. The service driveway is carried along the eastern side of the building, and down into a basement space near the center of the building's length, where unloading platforms are provided under cover—and in fact enclosed within the outer walls of the building. Rubber tired trucks will carry the deliveries thus made from the unloading platforms to the service elevators rising at or near the rear entrances of all the suites—so that all deliveries to the tenants and the movements of the servants themselves in or out of the building, will not disturb or inconvenience the occupants, who will have the use of the main halls entirely to themselves.

Situated in the midst of the best residential district, about 15 or 20 minutes from the center of the city of Detroit, with pleasant surroundings, an attractive outlook on all sides, and the river at the rear, it will be readily seen that the plan of this apartment need not be carried out on any such restricted and crowded basis as is necessary in even the most expensive of the "De Luxe" apartments of Chicago and New York. And this statement is justified by reference to the plan. Here it will be seen that the entire arrangement is upon an unusually spacious and luxurious scale. Every apartment is given outlook, air, and sunlight upon three sides by means of the court indentations and projections that are disposed down the length of the building. All apartments enjoy both North and South exposures, and either East or West.

Besides the six or seven principal



rooms contained in each apartment in this building, each suite has also a sun room and sleeping porch, with pivoting case-ment windows, so that they can be closed in and used as rooms, if desired by the tenants. One notably good point is to be observed in the planning of the individual apartments in this building, and that is the comparative isolation obtained for the servants' portion. Not only have they private elevators and stairways, but the space to be used by them within each apartment is both conveniently near the front door, and at the same time remote from the master's living portion of the apartment. Besides the conveniences of arrangement that appear upon the plan, the owners have provided a chauffeurs' rest room in the basement, and a garage accommodating three hundred cars within two blocks of the building. The structure is fire and sound-proof; there is a separate built-in shower and three baths in each apartment; all radiators are concealed; the living rooms have "electric fireplaces"; the kitchens are provided with individual electric refrigerator equipment, enameled gas ranges and electric plate warmers; a vacuum cleaning system is installed throughout the building, and spacious laundries, with complete electric and gas washing, drying and ironing machinery are provided, along with private store rooms, in the basement. Also, in addition to the servants' rooms found in each apartment, sixty additional rooms are provided elsewhere in the building, with public reception room and matron, to take care of such additional maids as may be required or desired by the tenants.

Turning from this Western type to the sort of plan that is more representative of the "De Luxe" apartment of the East, we can see in Fig. 47 a simple plan arrangement, by no means as elaborate as some of the more pretentious and recent New York apartments, but all the more representative from that very fact. The apartments are two to the floor, the plan similar to the front portion of Fig. 41—except for the fact that the lot was upon a street

corner, and has so suffered some of the readjustments necessary to make the best possible use of the additional exposures thus made available for the more important rooms. The apartments are of eight and nine rooms, the one on the corner having an additional bedroom. The plan is simple; a center dividing line, with passenger, service elevators and staircases disposed for the common use of the two apartments. The plan is of the condensed, or "close-coupled," type from front to back and all the rooms are disposed around a central square hall, or "foyer," and while the minor rooms and passageways are crowded, the principal rooms remain of ample and spacious size.

Fig. 45 shows another New York building, now with three apartments to the floor, and therefore more nearly and directly comparable with Fig. 41. The plan is upon a more ample scale, and is again further modified by its corner location. In the arrangement here shown the plan is more successful than Fig. 41, particularly evident in the manner in which the kitchens of the three apartments are served by the one service elevator and single staircase located in a remote corner of the public hall. The passenger elevator is well placed, and the enclosed staircase next it is so arranged as to be available as the principal stairs, or it may be used to supplement the more remote service staircase, in connection with the servants' doorway in the corner apartment. The apartments are well and thoroughly separated from each other—either by corridors, closets placed back to back, or sound-proofed partitions. The principal criticism of this building is directed against the somewhat unfair location of the front doorway to the rear apartment, "C," placed between the two fires, as it were, of the back doorways of its own and the corner apartment—an arrangement that seems the more unnecessary because both could have been easily carried more out of sight and sound in some such ingenious way as has actually been contrived in the case of the service entrance to the apartment, "A," nearby.



MANTEL IN PENNSYLVANIA  
MUSEUM. PHILADELPHIA, PA.



PANEL DETAIL—MANTEL IN PENNSYLVANIA MUSEUM, PHILADELPHIA.

## The EARLY ARCHITECTURE of PENNSYLVANIA PART X—MANTELPieces (Continued)



By A. LAWRENCE KOCHER

EVERY clearly defined tendency in English architecture of the eighteenth century had its echo on this side of the Atlantic. The drift toward eclecticism and the individualism which pervaded English architecture at the time of our Revolution can be seen taking visible form along the entire Colonial seaboard. The breaking of government ties does not necessarily imply an independence in matters of art and literature. America continued to look across the sea for her fashions in dress and furniture and building.

The fruitful influence of those "four enterprising brothers named Adam," as Pugin rather bitterly termed them, was clearly marked in America, and their numerous followers have left monuments to us in the way of dwellings planned in the Adam style and many building acces-

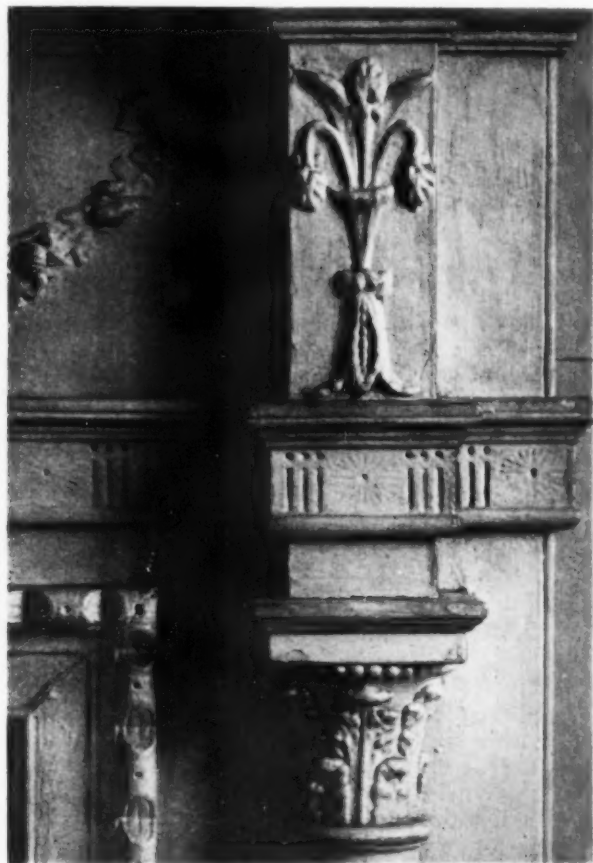
sories, such as mantels, ceilings and doorways.

The four Adam brothers, John, Robert, William and James, were associated in the practice of architecture in England within the years 1728-1794. Of the group, Robert was by far the ablest and most active. These architects posed as reformers and laid claim to having invented new ornamental details and they also regarded their methods of house planning as an innovation.

Robert Adam insisted that they "introduced a greater variety of ceilings, friezes and decorated pilasters, and added grace and beauty to the whole by a mixture of grotesque stucco and painted ornaments, together with the *rainceau*, with its fanciful figures and winding foliage. If we have any claim to approbation, we found it on this alone: That we flatter ourselves

we have been able to seize with some degree of success the beautiful spirit of antiquity, and to inform it with novelty and variety, through all our numerous works." They state further: "We have

voli, Pompeii and elsewhere in Italy. Reference is made in the "Journal of the Italian Tour" to the ancient sepulchres, where "stuccoes are remaining vastly entire; they are of excellent workmanship,



DETAIL OF CAPITAL-MANTEL IN PENNSYLVANIA MUSEUM, PHILADELPHIA.

not trod in the paths of others, nor derived aid from their labors."

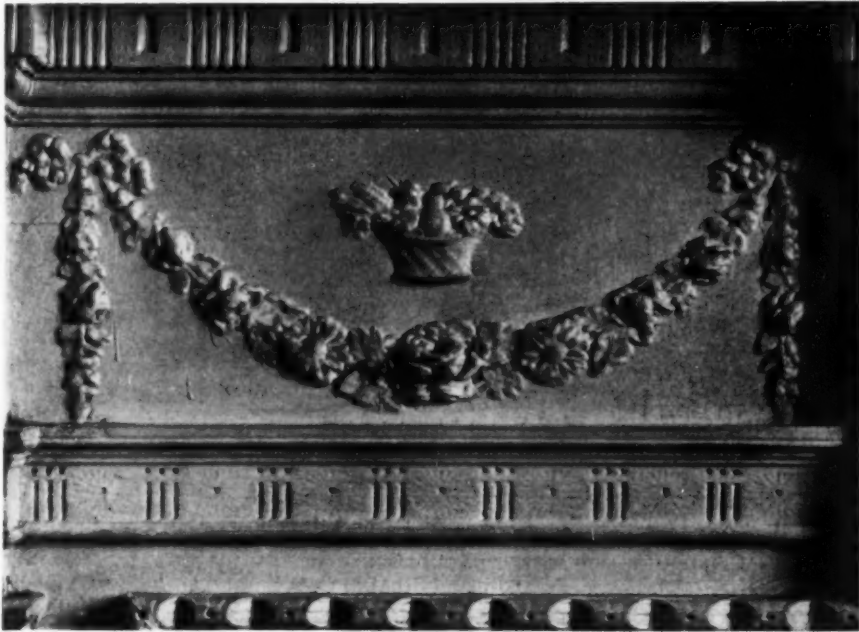
The inspiration for the Adam manner of design was derived from contact with foreign architecture. Travel on the continent brought Robert to the Roman monuments at Nismes in 1754, to Rome in 1756, and in 1757 he spent several weeks in measuring the ruins at Spalatro. The drawings and notes of these visits reveal an interest in the light and graceful stucco bas-reliefs in Rome, Ti-

and of the lowest relief I ever beheld." James Adam wrote of a subsequent Roman Journey: "At Pompeii, I saw a room which seemed to have been painted with arabesques."

It must be added that the brothers developed their design in a manner that was essentially their own. While they submitted themselves with open minds to the impression of the late "Roman grandeur," they nevertheless gave their work the impress of their own individual taste. No

architects of modern times have had a wider influence or a larger group of followers than Robert Adam and his brothers. By the architect of today there is, perhaps, no single phase of the Renais-

the universal practice to decorate the wood mantel with composition plaster. This naturally detracted from the permanence and dignity of the effect, and repetition of motives was encouraged by the



DETAIL—MANTEL IN PENNSYLVANIA MUSEUM, PHILADELPHIA.

sance in England that is given more assiduous study.

The new style proved to be a bombshell injected into the prevailing architectural practices of the late eighteenth century. The "talismanic charm of tradition was broken and the new taste soon became general in England; everything became Adamitic, including buildings and all manner of furniture." In America the new mode was gradually accepted, and it necessarily displayed modifications. In the transition, the style lost some degree of its grace, and simplicity was noticeably increased. The ornamentation of the English Adam mantel was usually in marble and but rarely was stucco enrichment\* added to wood framed chimney pieces. In the Colonies, on the other hand, it was

fact that molds were required for the casting. Their repeated use was almost unlimited.

In order to form an opinion regarding the Adam style in Pennsylvania, let us first examine a few of the dwellings of this colony that possess some of the qualities of the work of these distinguished brothers.

The Woodlands is a country seat, now almost hidden amid trees on the shady banks of the Schuylkill River. It was erected by William Hamilton in 1770 and is one of the most notable of the many estates built for the well-to-do citizens of British origin who had taken refuge in the American colonies. The north façade differs from the usual severely regular and rectangular front in that the central part is treated with six irregularly spaced Ionic pilasters of moderate projection.

\* Stucco is composed of a mixture of inert plaster, or gypsum, or wood fiber with a glutinous compound. It is squeezed from metal or wood molds.





MANTEL IN DERBY—CROWNINSHIELD HOUSE AT 202 ESSEX STREET, SALEM, MASS.  
CENTER PANEL AND FIGURES AT ENDS SIMILAR TO DESIGNS BY ROBERT  
WELLFORD, OF PHILADELPHIA.

Above these pilasters is an elaborate frieze which is surmounted by a steeply sloped pediment. The frieze is enriched with vertical fluting and rosettes and the necking of the Ionic capitals are likewise fluted. The detail and design are unlike those to which we have been accustomed. These qualities are undeniably foreign. It is safe to attribute the design of this mansion to the influence of the Adam brothers, particularly in view of the surprising nature of the plan. Robert Adam adopted a method of creating vistas and arranging his rooms *en suite* and of designing circular and oval apartments. Such are the characteristics of this plan.

We enter through a doorway with a segmental arched head, supported by attached columns. The vestibule is circular, with a domed ceiling. The surrounding wall is penetrated by four doorways alternating with four semi-circular niches. Engaged columns with well-shaped acanthus caps are spaced beneath a plaster

cornice. From this entrance we obtain a vista into all rooms of the first floor. The drawing room, of generous size and oval shape, is at the right. To the left is the stair hall, beyond which is the dining room, also designed upon an oval basis. The ball room is the most important and impressive compartment of the entire first floor level. It is situated at the center of the north side, overlooking the river and is approximately thirty-eight feet in length, exclusive of the large exedrae at either end which break the general rectangular outline. The circular and elliptical prototypes in England differ only in their more ornate treatment of walls. An explanation is given for such a plan by Robert Adam in the first volume of the work of his firm: "To express the advance and recess with other diversity of form in the different parts of a building, so as to add greatly to the picturesque of the composition." Also: "the rising and falling, advancing and receding, with the





MANTEL NO. 1 IN DILLER HOUSE AT 21 SOUTH QUEEN STREET, LANCASTER.

convexity and concavity, and other forms of the great parts, have the same effect in architecture that hill and dale, foreground and distance . . . have in landscape. That is, they serve to produce an agreeable and diversified contour that groups and contrasts like a picture, and creates a variety of light and shade, which gives spirit, beauty and effect to the composition."

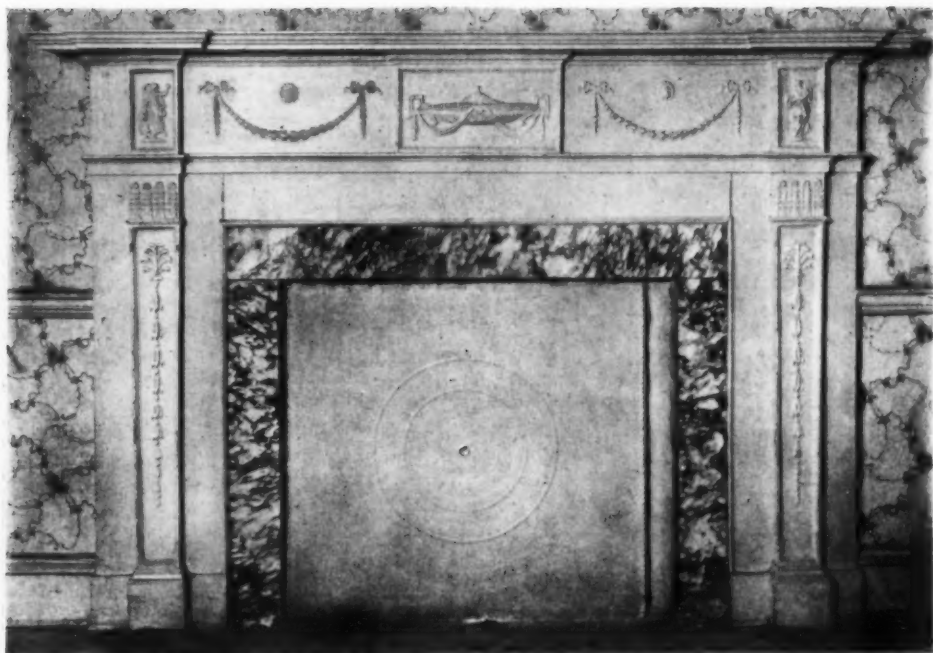
The William F. Diller House at 21 South Queen Street, Lancaster, Pennsylvania, is an example of city residence architecture of the Adam school. It was built in 1805 from drawings by the Philadelphia architect, John Hill, who gained a contemporary fame as the designer of the first State capitol building at Harrisburg.

In addition to an interesting floor arrangement, the Diller House is distinguished because of its excellent mantelpieces with stucco ornamentation applied to a wood structure. The design of these

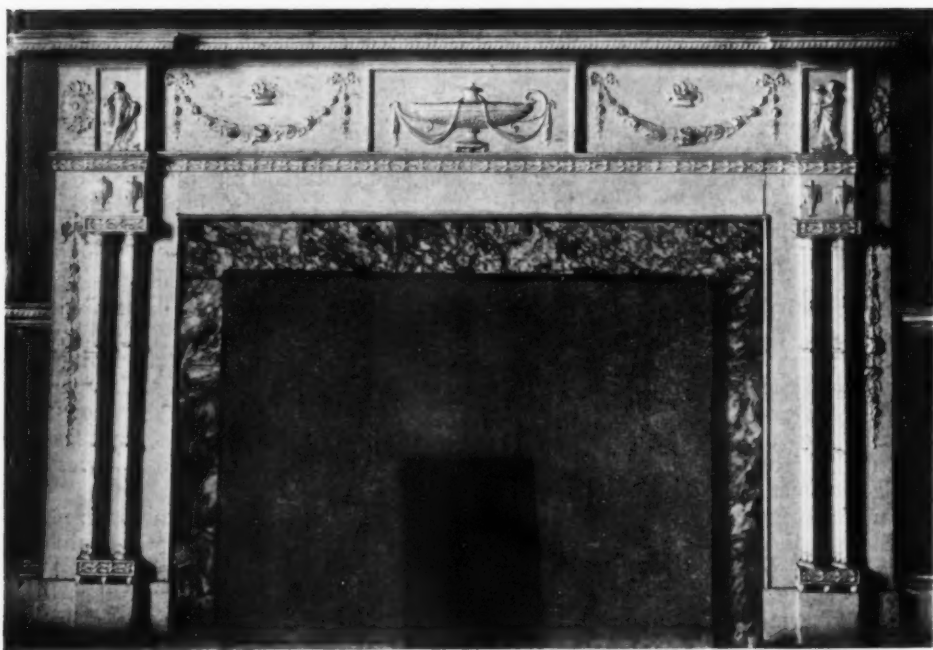
mantels presents little variation in the general disposition of parts; each possesses the usual divisions with columns and entablature framing the fireplace proper; each has a broken architrave above the supporting members. Four of the examples have coupled colonettes as end supports, while one varies in this respect by the adoption of pilasters with an inverted taper.

The plaster ornamentation includes classical compositions of Flaxman or Wedgwood inspiration, festoons of flowers, cloth swags, vases, rosettes and pendants of wheat and of oak leaves with acorns.

While none of these mantels is signed by their maker, there is little doubt that they are from the shop of Robert Wellford of Philadelphia. Wellford is listed as an "ornamental composition manufacturer" in the directory of Philadelphia for 1801. He continued to reside in this city



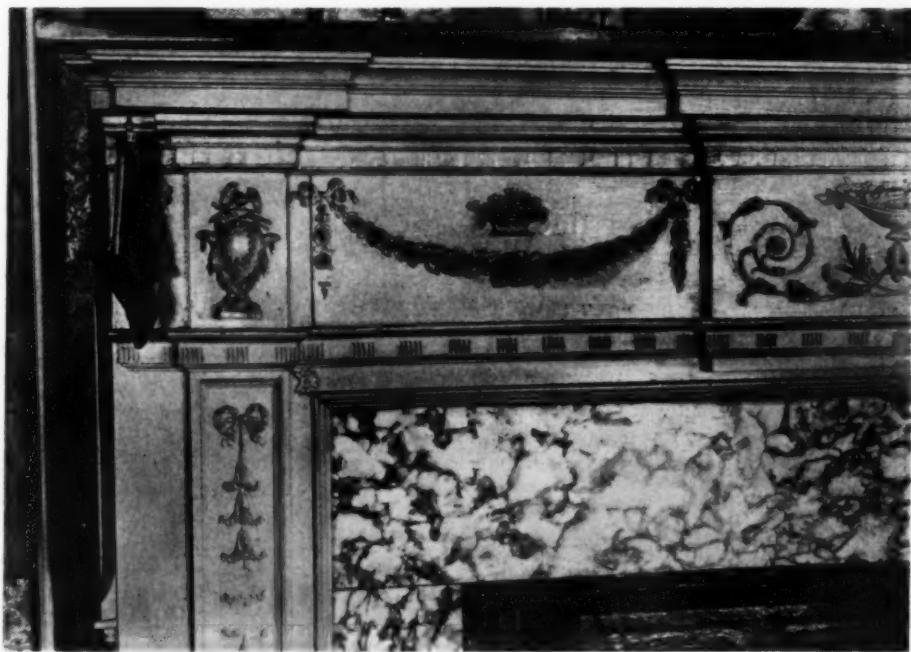
MANTEL NO. 3 IN DILLER HOUSE AT 21 SOUTH QUEEN STREET, LANCASTER.



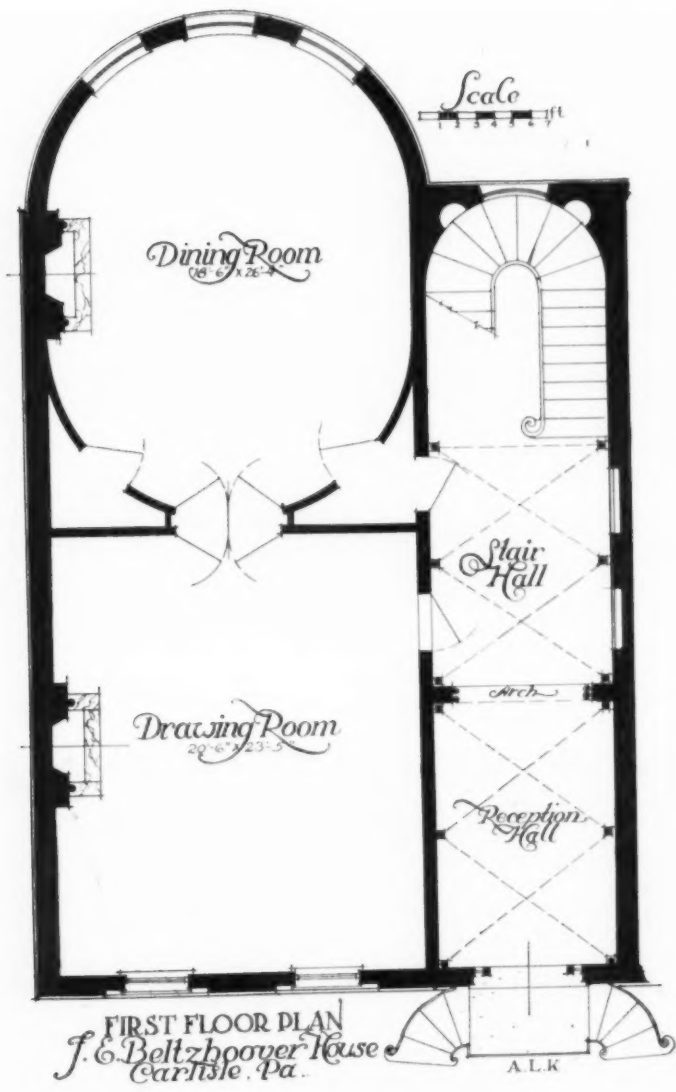
MANTEL NO. 2 IN DILLER HOUSE AT 21 SOUTH QUEEN STREET, LANCASTER.



MANTEL IN FRONT ROOM OF PACKER HOUSE, SUNBURY.

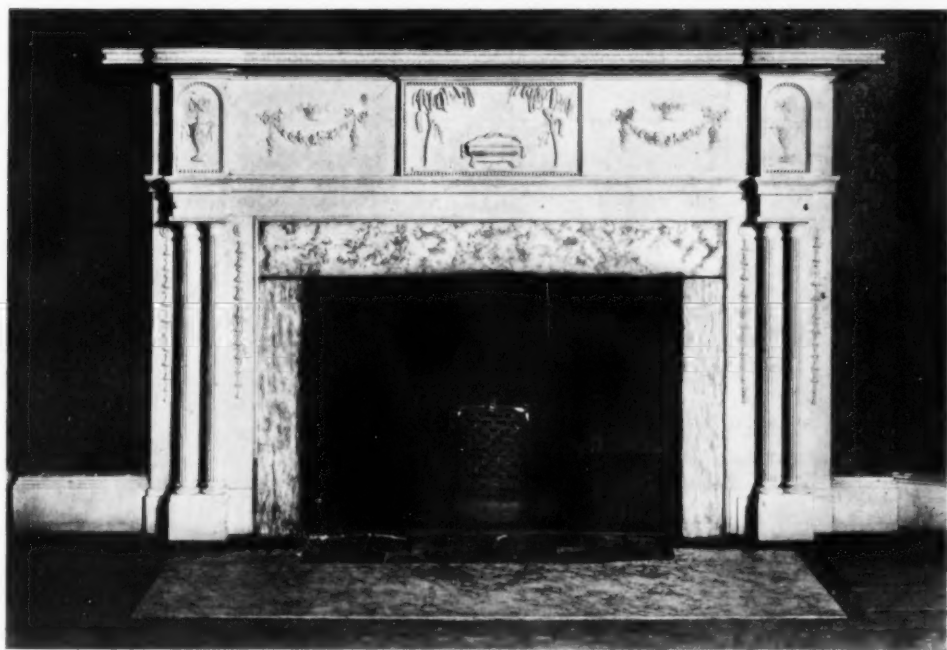


DETAIL OF MANTEL IN FRONT ROOM OF PACKER HOUSE, SUNBURY.

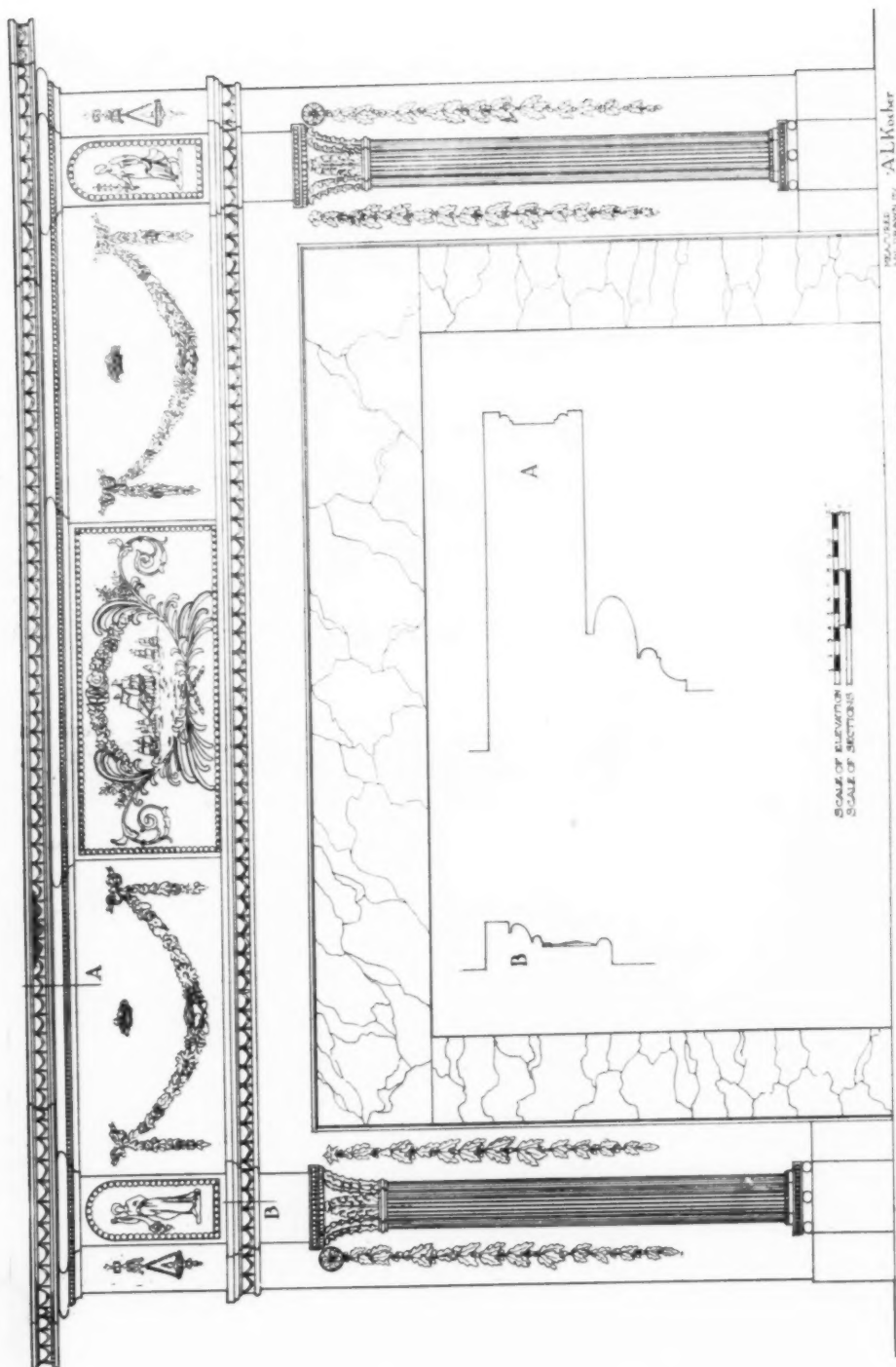




MANTEL, FRONT ROOM, SECOND FLOOR, BELTZHOOVER HOUSE, CARLISLE.



MANTEL, REAR ROOM, SECOND FLOOR, BELTZHOOVER HOUSE, CARLISLE.





until 1839, during which time he appears to have built up a reasonably flourishing business.\* Within the last three years a mantel in the F. E. Beltzhoover House in Carlisle, Pennsylvania, was brought to the attention of the writer. This mantel bore the inscription, "R. Wellford, Philadelphia, delit."

It is of considerable interest to have discovered the name of a distinguished and successful American craftsman who may have been responsible for a broad influence upon mantel design.

It appears reasonable to attribute the mantelpieces of the Diller House to Robert Wellford because some of the ornamental motives of these examples are identical with the motives which appear upon the definitely identified specimen in Carlisle. The festoons of flowers and the baskets of flowers and fruit are similar in every detail and are undoubtedly from the same molds.

By the same process of identification we can assign the mantel from the Packer House, illustrated in this issue, to the same maker, for again there is a similarity in design.

It may be of some importance to carry the investigation further in order to determine the extent in which this Philadelphia craftsman served other mantel makers in other parts of the country. We may note, for example, that the figure which appears on the projected end of Mantel No. 1 of the Diller House is repeated without modification on the same part of the chimneypiece of the Derby-Crowninshield House at 202 Essex Street in Salem, Massachusetts. This motive occurs once more upon the plaster frieze beneath the ornate ceiling of the drawing room of Solitude in Philadelphia, built for John Penn in 1785. It is altogether probable that this ceiling was added at a date subsequent to the erection of this building; or did later plaster workers derive some of their designs from it?

The composition illustrated on page 215 is from a mantel in the collection of the Pennsylvania Museum in Fairmount

Park, Philadelphia. It depicts a reclining figure holding two doves in leash. A cupid is at the right, drawing his bow as if to speed an arrow toward the birds. A second cupid is at the left. This composition is duplicated on the mantel already mentioned—the Derby-Crowninshield example of Salem. The architectural character of the two examples is sufficiently different to warrant the inference that they were the work of different joiners, but that the stucco embellishment was derived from the same source.

Handbooks of the day recommended the use of stucco of this nature. Nicholas Biddle, a carpenter and instructor in architectural drawing in Philadelphia, in 1805 wrote in his publication: "The use of composition ornaments on mantels, if judiciously chosen and placed, may have a very good effect, but care should be taken not to overload the work with them, and that there be proper connection between the ornaments on different parts." Asher Benjamin commends the same decorative means in his *American Builder's Companion*, published in 1807.

The plan of the F. E. Beltzhoover House at Carlisle is avowedly a copy of a plan by Robert Adam, but in the elevation we can detect at least a hint of the manner of such contemporary architects as Latrobe, Thornton and Mills. In fact, the design of this dwelling has been attributed to Latrobe, who prepared the plans for Dickinson College in the same town in 1805.

The Beltzhoover House was erected in 1815 for Stephen Duncan, son of a Supreme Court justice, Thomas Duncan.

Unquestionably the most important mantels of the mode which we are discussing have come down to us from this Carlisle mansion. There were, on the second floor, two examples alike in the design of their structural woodwork but different in ornamentation. The mantel of the front room, in an unusual way, reflects current events; that is to say, its inspiration was immediate and patriotic. The confident pride in the achievement of the American naval forces in the War of 1812, in which Commodore O. H. Perry defeated the British in the celebrated

\*Bulletin of The Metropolitan Museum of Art; Vol. XIV; No. 2; p. 36. Two American Mantelpieces, by Mr. C. O. Cornelius.

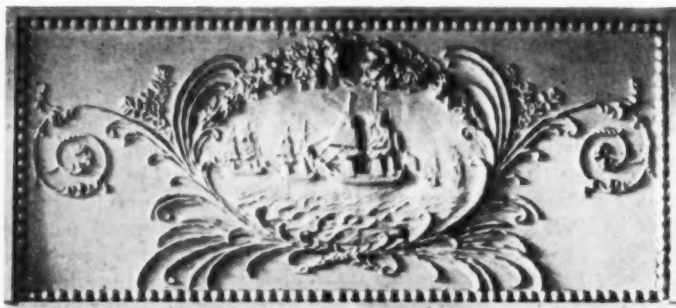
Battle of Lake Erie on September 10, 1813, is reflected on the elaborate panel at the center of the frieze. This victorious naval achievement is modelled in scant relief, surrounded by a delicate frame of conventional scrolls and flowers.

The triple cluster of colonnettes at either end is reeded and without taper, and has capitals of circular section, surrounded by acanthus leaves. The square base rests on balls of wood. The decorative elements in plaster consist of garlands and baskets of flowers, festoons of oak leaves and acorns, rosettes, and graceful figures that suggest the workmanship of Flaxman, framed in arch-headed, depressed panels. Slabs of Scotland marble surround the fireplace and hearth.

The mantel of the rear room differs only in the more sober treatment of the details. Slender Doric columns are beneath the projected ends, and smaller garlands adorn the frieze. The central tablet, which is now partly defaced, at one time exhibited an eagle with spread-wings, resting on a sarcophagus, on which is inscribed the sentiment: "To the Memory

of Departed Heroes." Beneath this tomb is the name of the maker: "R. Wellford, Philadelphia, delit." To complete the composition, willow trees with drooped branches are placed on each side of the sarcophagus.

The Adam episode in American architecture may not have attained a very high distinction in art, if measured by the exact standards of today. With regard to the figures and the detached bits of ornament, we feel that they are more or less an intrusion; they sometimes appear awkward and not in good scale. But one must judge the accomplishment by the age in which the work was done. The achievement was notable, indeed, when we consider that our country was without a classical background; craftsmanship had largely declined to mere carpentry, and traditional architecture was on the wane. We may well be eloquent as to the grace and dignity, the variety, *verve* and even restraint of these designs, the skillful handling of drapery, and, finally, the delightful ways in which a new material was turned to an aesthetic purpose.



PANEL DETAIL, FRONT ROOM MANTEL, SECOND FLOOR,  
BELTZHOVER HOUSE, CARLISLE.

The  
COMPETITION FOR THE FELLOWSHIPS  
OF THE AMERICAN ACADEMY *in* ROME



By  
*Rescoe Guernsey* Executive Secretary

AS the competitions for the Prizes of Rome annually awarded by the American Academy in Rome have now been concluded and the appointments announced, a brief account of the method employed for selecting the Fellows and of their life and work at the Academy may be of general interest.

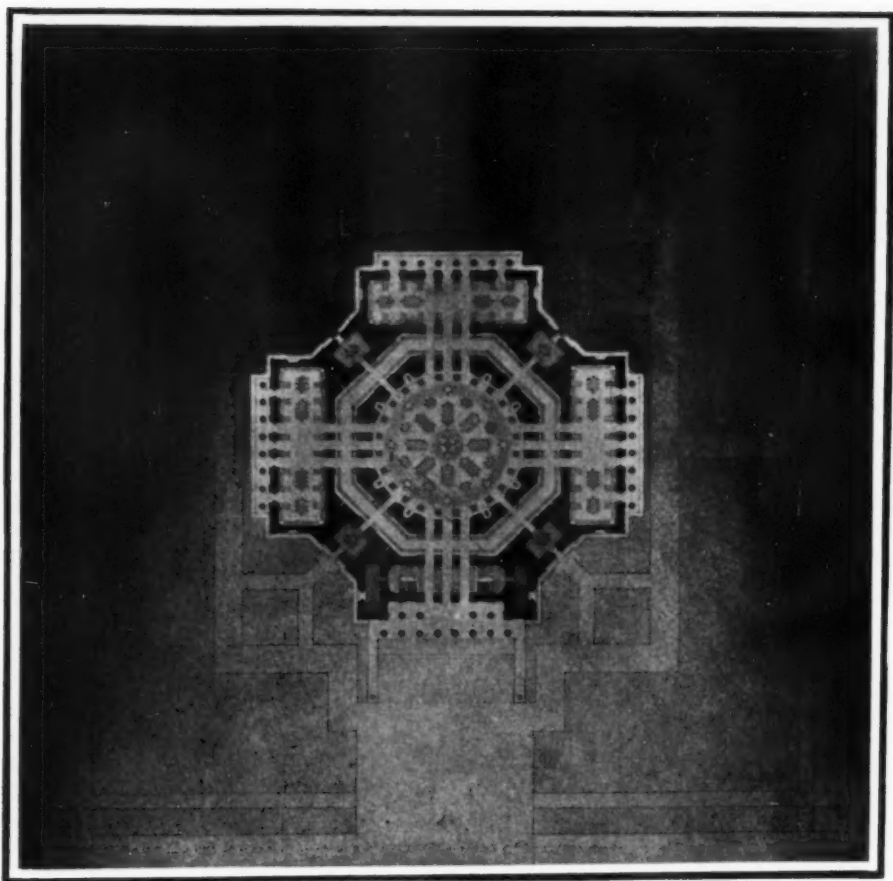
The declared purpose of the competitions in the Fine Arts is "to select from the available practitioners and advanced students in each of the arts of architecture, sculpture, painting and landscape architecture—musical composition has now been added—in the United States the one best fitted to fill for three years the position of Fellow of the American Academy in Rome. That one is best fitted whose natural capacities, general culture and professional training are such that he can best gain in the three years of his Fellowship and apply to the advancement of art in the United States after his return, a keen understanding of the qualities which give to the classics in all the arts their universal appeal, of the technical methods by which those qualities were secured in classic examples of his own art, and of the inter-relation of the arts with each other and with the general civilization of which they are part."

In the effort to secure competitors possessing these high qualifications every candidate is required to furnish satisfactory letters of reference and to submit a formal application, giving briefly the facts of his life and his training. Painters and sculptors must show evi-

dence of their special fitness by submitting specimens of their work. Candidates in architecture must have had at least one year's experience in an architect's office and must be graduates of an approved school of architecture, or college graduates who have studied at least two years in such school of architecture. The requirements in landscape architecture are similar to those in architecture.

The applicants who meet these requirements are permitted to enter the preliminary competitions. For in each branch of the Fine Arts the selection of Fellows is made after competitions, which are open to unmarried men, citizens of the United States. These competitions consist in the execution of such drawings, paintings, models and written statements as may be required. From the preliminary competitors the Jury may select any number up to ten for admittance to the final competitions, the duration of which is four weeks. The Jury then selects not more than four, and the Fine Arts Committee awards the Fellowship to that one of the four who, in their judgment, possesses the highest personal and professional qualifications.

The Fellows thus chosen are men of advanced attainment and are not sent to Rome to learn technique. In the words of the Academy's charter, its purpose is to enable "those who have passed with honor through leading technical schools or have been equally well qualified by private instruction or study to develop their powers and complete their training under the most favorable conditions of



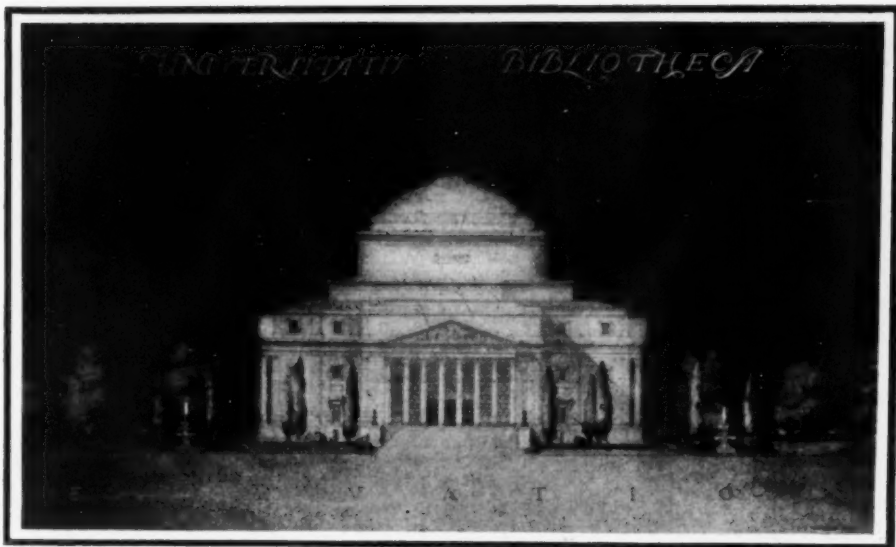
WINNING DESIGN IN ARCHITECTURE, COMPETITION FOR THE PRIZE OF ROME, 1921.  
BY V. L. S. HAFNER, MASSACHUSETTS INSTITUTE OF TECHNOLOGY, 1918.

direction and surroundings." There are no classes nor compulsory lectures at the Academy. The course of study, covering a period of three years, is not rigidly prescribed but is pursued under the general direction of the Professor in charge. It is three-fold in character:

(1) General studies, including general history and the Italian language; and the history, topography and archaeology of ancient Rome supplemented by actual examination of buildings and by collateral reading. The Academy possesses a well-equipped library and museum and numerous lecture courses upon art, topography, history, etc., are given by experts. Also

frequent excursions are made in and about Rome.

(2) Specific work, known as the "Academic Work." This, of course, varies in the different arts. In architecture, for example, the architecture of ancient Rome constitutes the chief subject of study during the first year, and the Fellow is required to measure, draw and render several of the best examples of classical detail and to execute a set of rendered drawings from his own actual measurements and notes of a restoration of a single classical building. In the same way the architecture of the Renaissance forms the chief subject of study during the second year. In the



WINNING DESIGN IN ARCHITECTURE, COMPETITION FOR THE PRIZE OF ROME, 1921,  
BY V. L. S. HAFNER, MASSACHUSETTS INSTITUTE OF TECHNOLOGY, 1918.

third year the Fellow must execute from his own actual measurements and notes a set of rendered drawings of one of the following subjects:

(a) The restoration of an antique building or group of antique buildings in Italy or Greece.

(b) A city square in Italy or a group of buildings in Italy.

(c) A villa of the epoch of the Renaissance.

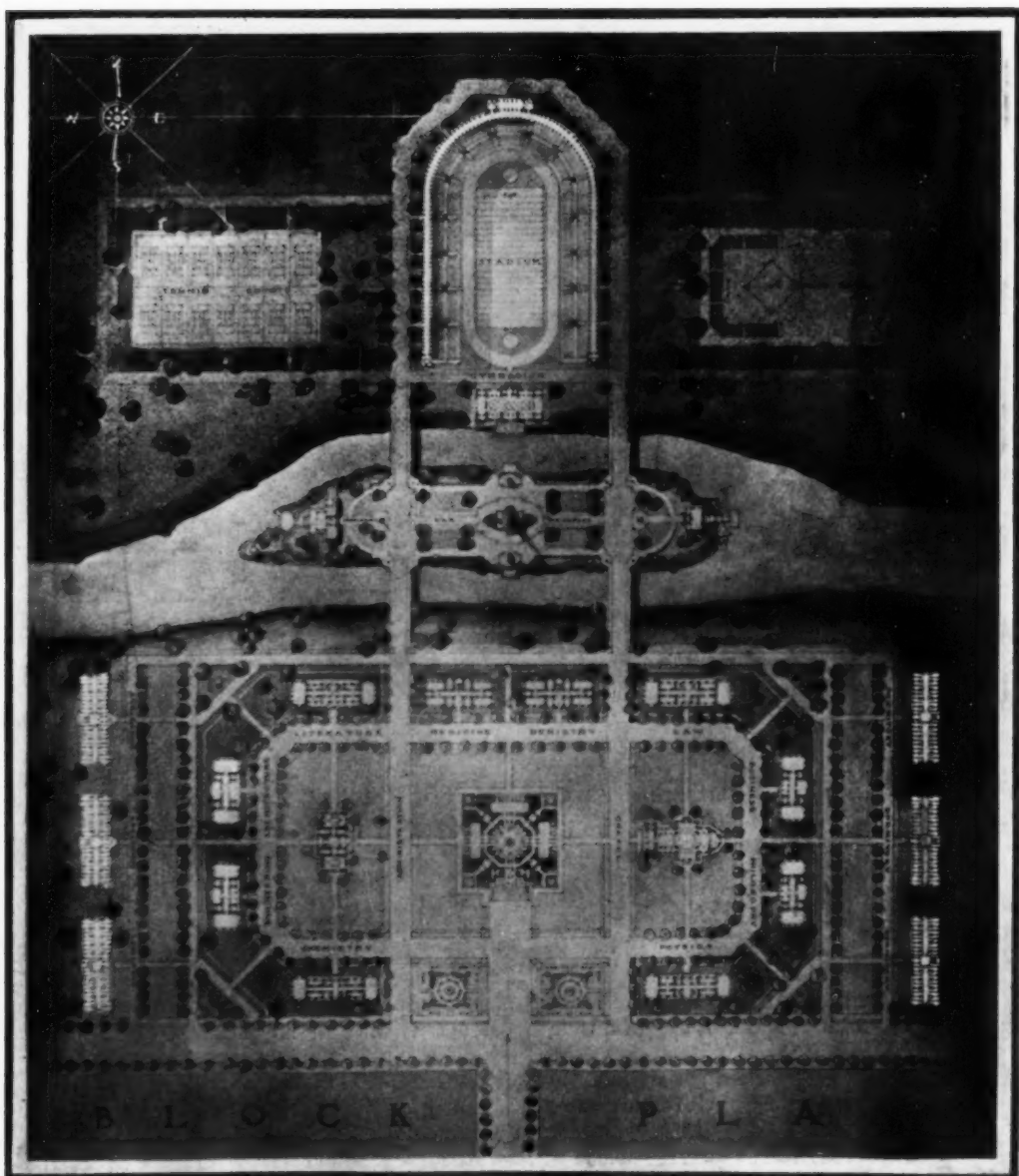
(3) Travel. Each year Fellows are required to undertake a certain amount of travel in Italy, Greece and such other classical countries as may seem advisable.

Collaboration of allied artists is a fundamental principle of the Academy, and not only are the Fellows in each department expected to cooperate with the Fellows in all other departments for the purpose of studying the inter-relation of the arts, but also for one month of each year teams consisting of a representative of each of the allied arts are required to work upon a prescribed collaborative problem. To the team whose work is adjudged to be the best a prize is awarded by the American Institute of Architects. Other collaborative prob-

lems are frequently undertaken voluntarily by different groups. During the past year an architect, a landscape architect and a sculptor collaborated upon a project for housing the American Embassy at Rome.

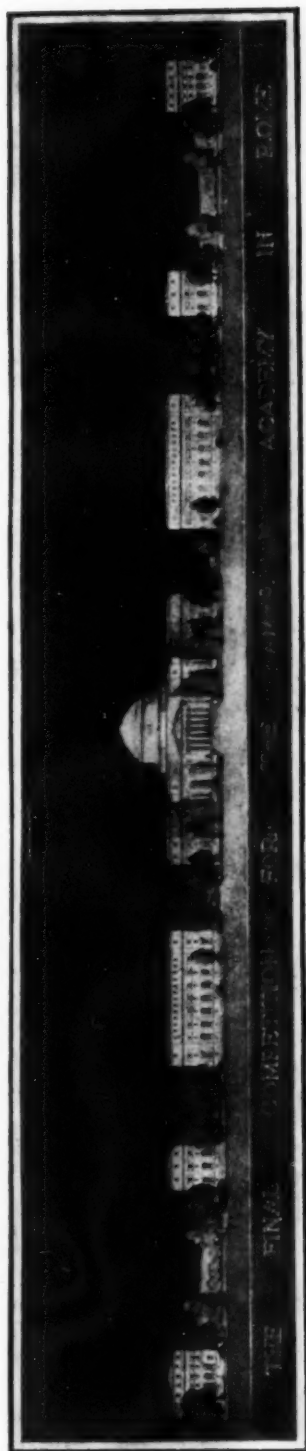
Coöperation and interchange of ideas are further promoted by the requirement that the Fellows shall reside in the Academy, where living quarters and studios are provided. While in residence the Fellows eat at a common table. The large dining hall in the main building accommodates both Fellows of the Academy and visiting students who hold Fellowships from other American institutions. The Academy admits to the limit of its capacity traveling Fellows from other approved institutions, provided they spend eight months of each year in classical lands. The daily social intercourse in travel, in studio, in library, in dining hall, is invaluable. Teas and receptions bring the students together and on special occasions still more attention is paid to social activities, such as a Christmas celebration or Thanksgiving dinner, to which the American Ambassador and other prominent guests may be invited.





A GROUP OF BUILDINGS FOR A UNIVERSITY OF THE FIRST CLASS. WINNING DESIGN IN ARCHITECTURE, COMPETITION FOR THE PRIZE OF ROME, 1921. BY V. L. S. HAFNER, MASSACHUSETTS INSTITUTE OF TECHNOLOGY, 1918.





WINNING DESIGN IN ARCHITECTURE, COMPETITION  
FOR THE PRIZE OF ROME, 1921, BY V. L. S. HAFNER,  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY, 1918.



TRIBUTE TO HEROISM. WINNING DESIGN IN  
SCULPTURE, COMPETITION FOR THE PRIZE OF  
ROME, 1921. BY E. R. AMATERS OF NEW YORK.



TRIBUTE TO HEROISM. WINNING DESIGN IN PAINTING,  
COMPETITION FOR PRIZE OF ROME, 1921. BY FRANK  
H. SCHWARZ, THE ART INSTITUTE OF CHICAGO.

The Fine Arts Fellows get their work before the public for study and criticism chiefly by means of annual exhibitions, both in Rome and in America. Each year the principal works of the returning artists are brought to this country and exhibited under the auspices of the Architectural League of New York. Their Majesties, the King and Queen of Italy, have honored the Academy in recent years by paying a visit to the annual May exhibition in Rome.

Publication is another means of making the work of the Fellows known. Two of the three volumes of the *Memoirs of the American Academy in Rome* already published contain plates illustrating the work of the School of Fine Arts. Articles published in the *Memoirs* may represent or be of interest to the members of either of the Schools, for the Academy is made up of two parts, School of Fine Arts and School of Classical Studies. During the present year the first of a series of *Papers and Monographs* will be issued. These publications will embody the results of the study and research of members of either School. Volume I will be a treatise on the "Cults of Campania," by Dr. R. M. Peterson, and Volume II on the "Cults of Etruria," by Dr. Lily R. Taylor. These *Papers and Monographs* may alternate in publication with the *Me-*

*moirs* or, if material and finances permit, issues of both series may appear in the same year. A special endowment fund for publication is greatly desired. Other publications of the Academy which appear regularly are the *Annual Report* and the annual *Announcement of the School of Classical Studies*. Various other pamphlets have been printed at infrequent intervals.

Thus is the effort being made to fulfil the aims of the American Academy in Rome by selecting as Fellows the best candidates that can be found and giving to these artists and scholars opportunities for intimate association in the pursuit of life, study and travel in an atmosphere of art and amid the inspiration of masterpieces. Such experiences, it is believed, cannot but result in refining the taste, sobering judgment, stirring the imagination, inspiring noble standards, and enlarging the powers of the mind. It is in this way that the Academy, as a national institution, is endeavoring to lead in the lofty purpose of raising the standard of American art and letters.

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[In the account of last year's competition in architecture, in the September issue, an error of attribution was made in the case of two of the designs. That of Mr. Cardwell, ranked second by the jury, was erroneously attributed to Mr. Hindenach; and the latter's design, ranked third by the jury, was attributed to Mr. Cardwell.—Editor.]

## THE MEMORIAL ROOM AT QUANTICO, VA TO CAPTAIN PHILLIPS BROOKS ROBINSON

*Murphy & Dana, Architects*

A NEW memorial room at Quantico, Virginia, has been presented to the officers stationed at this permanent camp of the Marine Corps, by the widow of Captain Phillips Brooks Robinson, who served in the corps during the war and who died as the result of an automobile accident at Hyattsville, Md., November 2nd, 1918. He was the son of Edward Robinson, of the Metropolitan Museum of Art. A model and photographs of this room are being shown at the 36th Annual Exhibition of the Architectural League at the Museum.

Quantico is, in a sense, the Annapolis or West Point of the Marine Corps, most of its officers graduating there, but in 1916 there was very little accommodation for either officers or men. Even after the Y. W. C. A. and the Red Cross put up buildings for the care of the sick and the enlisted men, there was no general officers' club.

Recognizing the need, Captain Robinson started plans for a simple living room in which officers might at least entertain their wives, mothers or friends. But before this could be accomplished he was called from Quantico and sent to headquarters to serve on General McCawley's staff.

From his youth Captain Robinson had admired the Marine Corps. He knew its history and believed it the highest form of patriotic service. When the Marines made their stand at Chateau Thierry and Belleau Wood—at a crisis when, as one Frenchman expressed it, "We felt in our faces the very breath of the approaching beast"—Captain Robinson said that

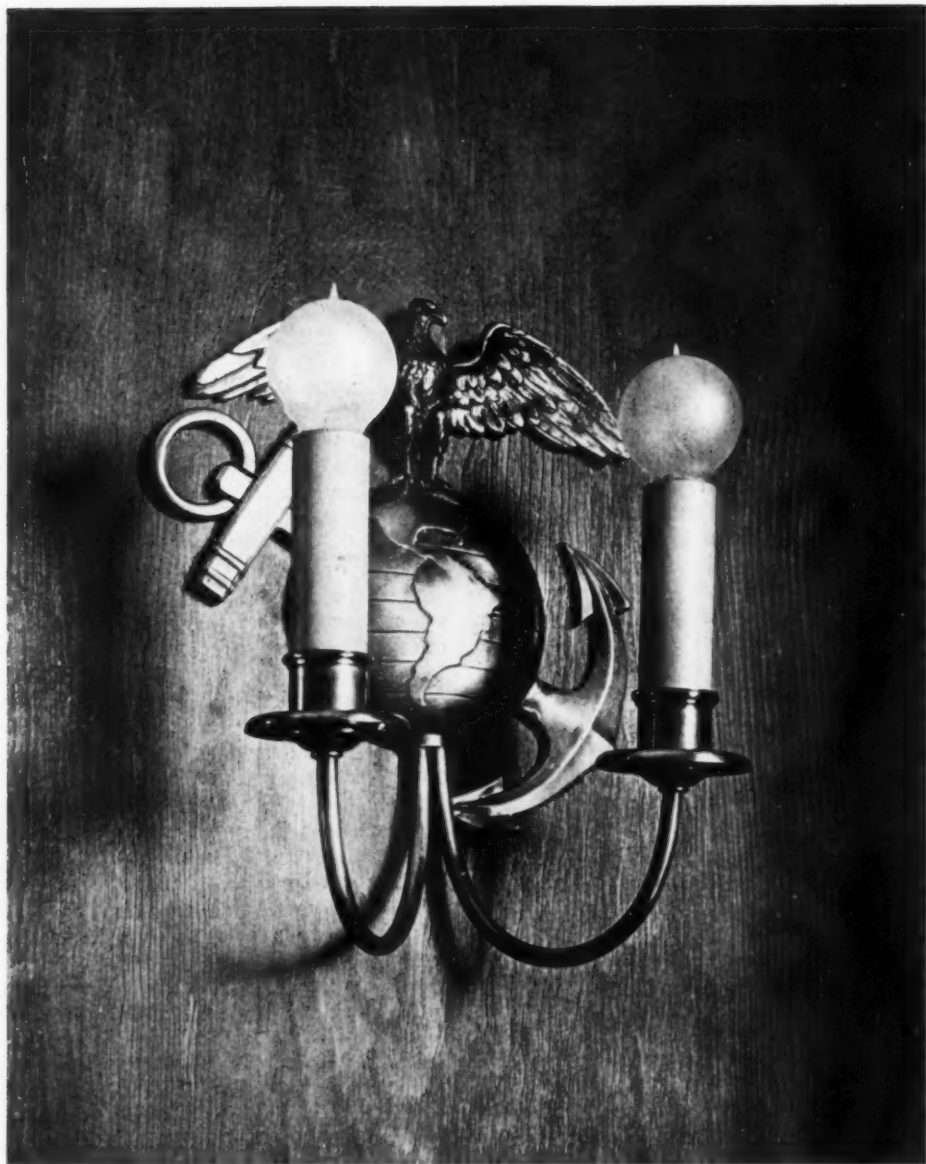
was only what they had always done; people simply didn't know about it.

The room at Quantico is the result of his enthusiasm and affection. It is 36 by 21 feet, with two windows opening out upon a green, faced by officers' quarters, and a third, a large Palladian window, overlooking the Potomac River and the Virginia hills.

The room is full panelled in selected pine. The fluted pilasters and recessed bookcase with decorative shell top and all the details are in the early American manner. They were inspired by the panelled room from South Coventry, Connecticut, now in the Metropolitan Museum. The floor is of broad oak boards set with wooden pegs. The fireplace is in gray and white marble after the fireplace at Marmion, the home of Mrs. Washington's family.

The large decorative map of Belleau Wood over the fireplace was designed and painted by Barry Faulkner from actual air maps and documents gathered by the Marine Corps for their official records. At the top of the map is the famous citation from General Degoutte:

"Order: In view of the brilliant conduct of the 4th Brigade of the 2nd U. S. Division, which in a spirited fight took Bouresches and the important strong point of Belleau Wood, stubbornly defended by a large enemy force, the general commanding the 6th Army orders that henceforth in all official papers the Bois de Belleau shall be named Bois de la Brigade de Marine." This map is the gift of Mr. and Mrs. Edward Robinson. Below the map are vignettes of stricken towns of the district.

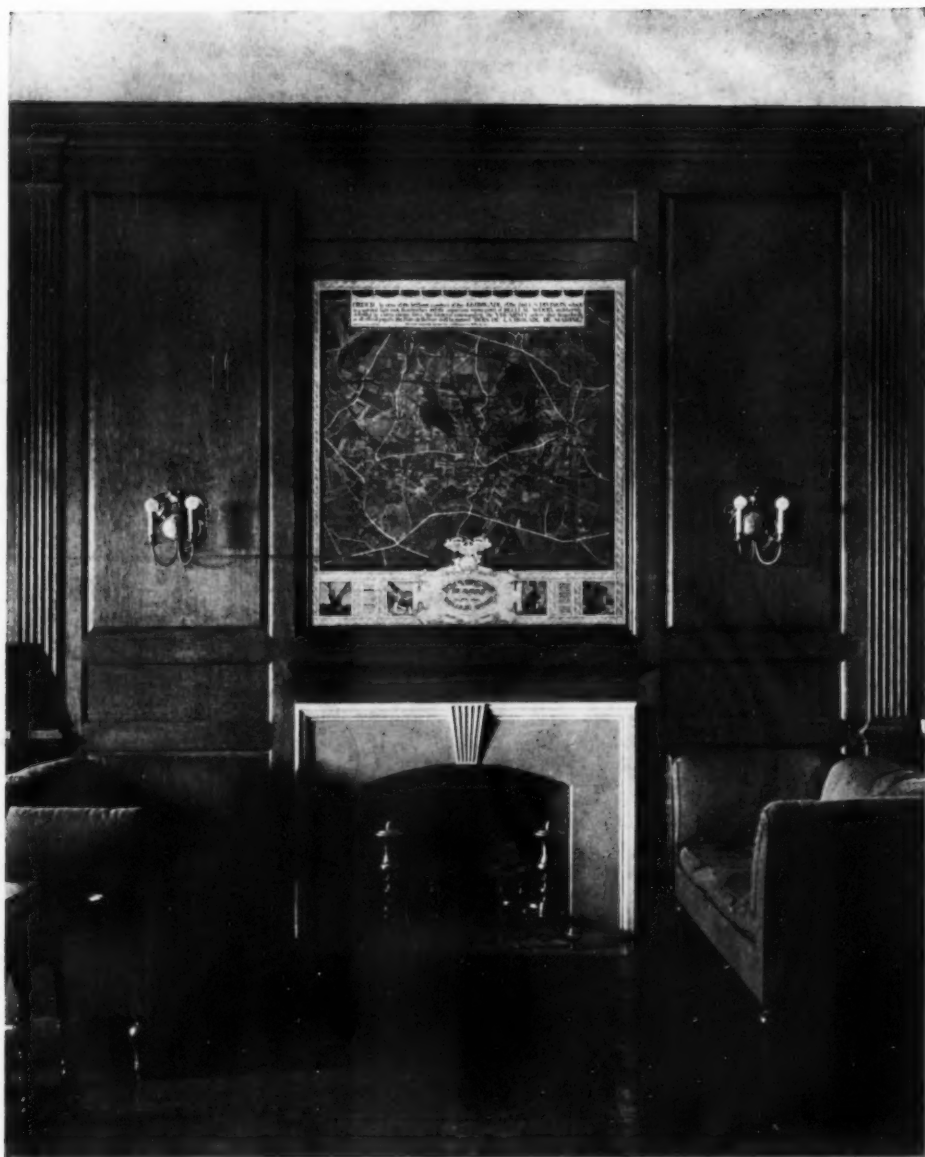


WALL BRACKETS WITH INSIGNIA OF THE  
MARINE CORPS. MEMORIAL ROOM AT QUAN-  
TICO, VA., TO CAPTAIN PHILLIPS BROOKS  
ROBINSON. MURPHY AND DANA, ARCHITECTS.





MEMORIAL ROOM AT QUANTICO, VA., TO  
CAPTAIN PHILLIPS BROOKS ROBINSON.  
MURPHY AND DANA, ARCHITECTS.



THE FIREPLACE, MEMORIAL ROOM AT QUAN-  
TICO, VA., TO CAPTAIN PHILLIPS BROOKS  
ROBINSON. MURPHY AND DANA, ARCHITECTS.



DECORATIVE MAP OF BELLEAU WOOD BY BARRY FAULKNER.  
MEMORIAL ROOM AT QUANTICO, VA., TO CAPTAIN PHILLIPS  
BROOKS ROBINSON. MURPHY AND DANA, ARCHITECTS.



MEMORIAL ROOM AT QUANTICO, VA., TO CAPTAIN PHILLIPS BROOKS ROBINSON.  
Murphy and Dana, Architects.